



In This Issue

Page 1

MSTA Conference Details

Page 2

Professional Learning

Grants

Page 3

Grants

Pages 4-5

Student Opportunities

Page 6

Links and Resources

Science Matters - Michigan

To submit content or join the Science Matters email list, please contact:

Richard Bacolor

Science Matters Michigan,
State Coordinator

Email: **Bacolor@resa.net**



Save the Date!!

#MSTA19 is March 1-2, 2019 in Grand Rapids

<https://mstaevents.org>

Check out the amazing Science & Engineering Conference lineup here:

<https://msta2019.sched.com>

MSTA Membership Information: [Click Here](#)

[*Have a Submission for Science Matters Michigan? Email Us.*](#)

Professional Learning Opportunities

Michigan Advancing Equity in STEM (MAE-STEM)

Are you a leader in STEM education in your region?

Would you like to be part of a regional team (of up to 6 educators) focused on

- becoming knowledgeable about equity in mathematics and science teaching and learning?
- creating discussion and dialogue spaces for identifying equity issues in your region and proposing solutions that fit your region?
- building capacity of building-level and district leaders across Michigan to identify, implement and support multiple strategies for improving equity and access to relevant mathematics and science learning for K-12 students?

If so, join Michigan Advancing Equity in STEM. \$100 reserves your spot on a regional team where, together, we will deepen awareness and understanding of why disparities exist in education. We will cultivate ideological shifts so that we can lead STEM equity efforts in our regions in a deeply informed way.

As a regional team member, you will engage in four days of Professional Learning with STEM Education leaders from across the state with Paul Gorski and Emily Affolter of the Equity Literacy Institute and your regional team. You will also have support for four days of regional planning and implementation back at home with your team. The registration fee of \$100 per person covers lunch and snacks for all four dates. All four sessions will be hosted in the Lansing area. [Find out more!](#)

Statewide Professional Learning Sessions (hosted in the Lansing area)

Part 1: January 24, 2019

Part 2: March 14, 2019

Part 3: April 16, 2019

Part 4: May 30, 2019

Grants

Michigan Space Grant Consortium

(MSGC - <https://mi.spacegrant.org>) is a NASA-supported program that exists to foster awareness of education in, and research on space-related science and technology in Michigan.

One of its offerings is the K-12 Educator Incentive Program which offers (1) up to \$400 to support K-12 teachers to attend STEM conferences/workshops and engage in STM educational enhancement activities; and (2) up to \$200 to purchase materials and supplies for innovative instructional initiatives.

For more details, see the K-12 Educator Incentive Program tab on our website. Applications are accepted throughout the year until the annual funding for the program is depleted.

Brenda Vyletel
 Michigan Space Grant Consortium, Program Manager
 University of Michigan
 Climate and Space Sciences and Engineering Department
 Climate and Space Research Building,
 734.764.8327 office
 734.846.1918 cell
bvyletel@umich.edu

Scholarship & Grant \$ for Amazon Rainforest PD Workshop

What: 2019 Educator Academy in the Amazon Professional Development

When: July 1-11, 2019

Grant: \$1500 Vernier Software & Technology Grant for a HS/AP Science Educator

Scholarships: \$1250 Amazon Workshops Scholarships for K-12 Educators

Application Deadline: **February 1, 2019**

Get more info: <http://amazonworkshops.com/educator-academy/>

The July 1-11, 2019 Educator Academy in the Amazon Rainforest of Peru is a cross-curricular professional development workshop for formal and informal science educators. Highlights include:

- 21st Century Instruction: 5E Lesson Design ~ Inquiry-Based Exploration ~ STEM
- Inquiry Protocols & Resources: Vernier Software & Technology ~ Celestron Digital Microscopes
- Global and Cultural Perspectives: Service Learning ~ Sustainability ~ Global Education
- NEW! A specialized track for HS bio and environmental science educators with a focus on sustainability, conservation, and field work with the Maijuna indigenous community
- Work side-by-side with scientists and researchers on citizen science projects and field studies.
- Explore the ¼ mile long ACTSPeru Rainforest Canopy Walkway in one of the world's most biologically diverse environments.
- Work with fellow educators to explore strategies for using the Amazon as a vehicle for incorporating STEM education, inquiry-based learning, and sustainability science education into your classroom.

Contact program director, Christa Dillabaugh

at christa@amazonworkshops.com or 1-800-431-2624 for more information.

Michigan Nature Association 2019 Nature Field Trip Grants

The Michigan Nature Association announces the availability of \$500 grants for field trips to natural areas for the 2018-2019 school year. These grants are intended to assist teachers in developing fun, hands-on field trips for teaching students about the natural environment. The grants can cover bus transportation and educational supplies for field trips to eligible natural areas, including community nature centers, MNA sanctuaries, state parks, and other conservation lands deemed suitable for field trips. MNA is especially interested in applications from urban schools with limited access to natural areas.

Application deadline: February 22, 2019.

[Click here for Application PDF](#)

Student Opportunities

Aquaculture Challenge

I am inviting you and your school to participate in this coming years Aquaculture Challenge program. If you are not familiar, the aquaculture challenge is a competitive science and business competition in which teams of students design and create an aquaponics system. The competition is composed of three parts including 1) Designing and creating a system 2) Monitoring the system and 3) Creating a business plan to accompany the system.

Student teams are provided a free Arduino control board and probes to go along with it as well as a water chemistry monitoring kit. Student teams provide their own equipment to create the aquaponics system. This program is sponsored and run through Lake Superior State University and Michigan Sea Grant.

The **registration deadline for this year is January 18th**. There is also an optional open house where students can visit Lake Superior State on January 11th. The competition then runs through the end of March. On April 8th, student teams must submit three videos showcasing their accomplishments, as well as supporting materials online by April 8th. A virtual awards ceremony will be held April 11th. [These dates and an overview of the competition can be found here.](#) [The team rules manual with detailed information about the competition is here.](#)

Registering a team is free and easy. [Simply click here and fill out the required information.](#) Teams can work on the competition as part of a class or as an after school activity. Multiple teams can register per school, and teams can also register as part of after-school club or other academic related organization.

Additional information about this competition and aquaculture in the classroom can be found at www.ncrac-yea.org

Elliot Nelson
Michigan Sea Grant Extension Educator
Michigan State University Extension
Phone: 906-635-2845 | Cell: 906-322-0353
Email: elliottne@msu.edu | Web: miseagrant.umich.edu | msue.msu.edu
Address: Crawford Hall Room 212, 650 W. Easterday Ave, Sault Ste. Marie, MI 49783

Southeastern Michigan Junior Science & Humanities Symposium

High School Student STEM Researchers and their **Teachers** are invited to attend the Junior Science and Humanities Symposium (JSHS) Program, sponsored by the Academy of Applied Sciences and the U.S. Army, Navy, and Air Force. Since its inception in 1958, the primary aims of JSHS are *to promote research and experimentation at the secondary school level and to recognize students for original research achievements*. **Participation in the symposium is FREE for all eligible high school students and their teachers.**

In the Southeastern Michigan region, the program is housed in the College of Education at Wayne State University. Every year, students from high schools state-wide, attend the symposium at Wayne State University, where they present their research and participate in tours of selected science laboratories, and interact with professional science researchers throughout the day.

Finalists are notified of awards to advance to the National Symposium during the dinner banquet.

Regional finalists will be invited to attend the National JSHS, *all expenses paid* by the Army Educational Outreach Program.

- The Symposium is a valuable resource for students who plan to participate in this year's Science Fair and/or Science Olympiad.
- Students who present their research at the Symposium have the opportunity to receive significant scholarships, to the University of their Choice, at the regional and national levels.
- **Registration opens October 4, 2018** at: <http://coe.wayne.edu/ted/science/jshs/>

Emerging Female Scientists

A new journal called Emerging Female Scientists is now ready to receive submissions for a early Spring 2019 inaugural first edition!

Emerging Female Scientist (EFS) is the first electronic, peer-reviewed, open access scientific journal promoting and publishing articles by female middle and high school students. The goal is to inspire, recognize, train, and equip students to pursue and share their scientific ideas and research. All research submissions must have a female as the primary author. Every submission is received and reviewed by an all-female, renowned editorial board, which is guided by a Scientific Advisory Board of nationally-recognized scientists, researchers, and educators.

The editorial and advisory boards are committed to fostering a fun and meaningful research and publication experience. Submissions will receive constructive feedback on the content, research methods, results, and conclusions. This experience teaches students about the publication process from peers and experts who ultimately help them refine and improve their work into a polished and worthy final research product. In addition to original research, students can also submit interviews with female STEM leaders, historical vignettes of noted female scientists, and/or current science and technology review articles.

NSTA is well known for its commitment to furthering science education and fostering STEM activities nationwide, as well as working with Key Leaders in each state to develop the Science Matters program. Can you bring this announcement to the attention of Key Leaders and STEM Coordinators in your state who may find the journal a useful educational opportunity for aspiring science students? Additionally, my editorial staff would welcome input on the journal and how it can best meet the goal of increasing the number of young women who choose science as their career path.

Please visit our new website: www.emergingfemalescientists.com

Contact:

Margaret DiRuggiero
Founder and Chief Editor
Stony Brook School, Class of '20
Inquiry@emergingfemalescientists.com
631-601-6358

Links & Resources

Michigan Science Teachers Association

Science Matters Network Home

Science Matters is a major public awareness and engagement campaign designed to rekindle a national sense of urgency and action among schools and families about the importance of science education and science literacy. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. The Building a Presence for Science network—now the Science Matters network—reaches readers in 34 states and the District of Columbia.

The Science Matters network is a vehicle for information dissemination and communication. Through the electronic network, teachers of science become aware of professional development opportunities, science resource materials, and funding programs within their area, region, state, and/or at the national level. They will also receive important information, helpful articles and materials to pass on to parents that focus on quality learning experiences in the sciences—starting at an early age—and why science education is critical to science literacy and our future workforce.