

## Join our 2020 Virtual Professional Development Institute



# Ignite Your Students' Interest in Science through Place-Based Activities & STEM Role Models at the **BELLE ISLE AQUARIUM**

**In Response to COVID-19**, our highly regarded Belle Isle Aquarium Summer Teacher Institute is being offered **ONLINE**, August 3 – 6, 2020

ALL 5th Grade teachers in DPSCD are encouraged to participate!

### **SIGN UP NOW**

to be eligible also for small grants for student science projects

### **ON-LINE REGISTRATION:**

**[www.BIAquariumSTEM.org](http://www.BIAquariumSTEM.org)**



**4-Day Summer Teacher Institute**  
**9:00 am-3:30 pm, M-Th, Aug 3-6, 2020**

For the *first time* and with the encouragement of DPSCD, the Summer Institute will be **ONLINE**. The Summer Teacher Institute will help your class get the most out of place-based activities with Belle Isle Aquarium educators.



National Science Foundation  
WHERE DISCOVERIES BEGIN

For more information, contact:

Jeffrey Ram, co-Project Director

Sandra Yarema, co-Project Director

Wayne State University,

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Subject line: BIA Education Research

WAYNE STATE  
UNIVERSITY

Join a National Science Foundation program to achieve your Curriculum Goals and Excite Your Students' Interest in Science and STEM Careers. The program focuses on **Michigan 5th Grade Science & Social Studies Standards** and how the Belle Isle Aquarium can help you meet these through place-based learning activities with the Belle Isle Aquarium.

### How Teacher Participants Will Benefit:

1. The 4-day online Summer Teacher Institute with Aquarium educators will:
  - a. Convey new knowledge and skills through presentations, hands-on activities, virtual field trips, and development of grant projects and lesson plans.
  - b. **Provide classroom supplies, activity guides, and other resources.**
  - c. Pay you **\$800 for attending the Summer Institute**, with additional stipends for other activities through 2021.
  - d. Enable you to earn **24 SCECHs** from Michigan Technological University at no additional cost, with completion of Institute requirements (attendance, readings and assigned activities).
2. **Support bringing your class on a field trip to the Belle Isle Aquarium (BIA) pending resumption of DPSCD field trips.** Learn about our NEW virtual field trip and how to engage your students in scientific investigations, science career explorations, and hands-on activities.
3. Encourage applications for **\$500 grants** for student projects in your class.

### Program Requirements of Teacher Participants:

- Attend a 4-day Online Summer Institute with Aquarium educators.
  - The Institutes are fun and provide instructional tools
  - The Online Institute is limited to 35 participants, so **sign up early!**
  - Sign up for the program NOW** to be eligible for small grants.
- Engage your classes with Belle Isle Aquarium educational activities.
- Participate in research to assess teachers' and students' STEM interest, knowledge, and behavior. Participation in research activities is voluntary.

DPSCD Office of Research, Evaluation, Assessment and Accountability has approved this project.



Michigan  
Technological  
University



sponsored by the Erb Family Foundation

Register on-line at **[www.BIAquariumSTEM.org](http://www.BIAquariumSTEM.org)**  
**Space is limited to 35 teachers. So sign up early.**

**Project title: “Promoting Student Interest in Science and Science Careers Through a Scalable Place-Based Environmental Educational Program at a Public Aquarium”**



**This National Science Foundation Project includes funding for:**

- ◇ Teacher Professional Development (4-day Summer Institute & 1-day Fall workshop).
- ◇ Place-Based Activities (usually Class Field Trips) to the Belle Isle Aquarium (BIA).
- ◇ Project and field trip grant opportunities, Professional Learning Communities, and more.
- ◇ Research to determine changes in teachers and students relating to science and STEM career attitudes, behavior, and knowledge.

**4-Day Summer Institute by the Belle Isle Aquarium (August 3 – 6, 2020)**

**The Institute will meet M-Th, 9 am-3:30 pm.** Due to DPSCD’s decision to offer no in-person professional development this summer, we are moving the Summer Institute ONLINE. Each day we will meet online from 9 am – noon, with breaks and breakouts, then go off-line for lunch and assigned self-directed activities offline until 3 pm, reporting back and sharing from 3 to 3:30 pm. The Institute is designed to enhance pedagogy and knowledge of content, science processes, and science careers of 5<sup>th</sup> grade classroom teachers. Activities include exploration of aquatic systems, field trips, data collection and analysis, and hands-on experiments. Science, social studies, math, language arts, and technology standards will be woven into the Institute, including discussions with experts and science career role models.



To learn more about our Summer Teacher Institute, please view our award-winning STEM-for-ALL Video about it, at <https://stemforall2020.videohall.com/presentations/1753>. This summer many of the hands-on experiences at the Institute will be done as "do it yourself activities" with materials that will be sent to you before the Institute, to give you as meaningful an experience with your colleagues as previous Institutes.



**Field Trips to the Belle Isle Aquarium**

Your students will dive into the 5th grade Next Generation Science Standard on “Matter and Energy in Organisms and Ecosystems.” We’ve converted our in-person field trip to two virtual field trips, at <https://www.biaquariumstem.org/virtual-field-trip.html>, but will resume in person when allowed. Students explore food webs utilizing our exhibit animals and analyze how matter moves through an aquarium. Students will meet scavengers, decomposers, and invasive species and virtually conduct water quality tests. During their field trip at the Aquarium, students will also have the opportunity to meet our STEM professionals, ask questions, and discuss possible science careers.

**For more information, contact:**

*Belle Isle Aquarium*

*Field Trip Program Coordinator:*

**Amy Emmert, Belle Isle Conservancy**  
[emmerta@belleisleconservancy.org](mailto:emmerta@belleisleconservancy.org)



*Summer Institute Coordinator:*

**Joan Chadde, [jchadde@mtu.edu](mailto:jchadde@mtu.edu)**  
Michigan Technological Institute



Michigan  
Technological  
University

**Register on-line at**

**[www.BIAquariumSTEM.org](http://www.BIAquariumSTEM.org)**

**PD, pay, and project ideas and grants**

**APPROVAL PERIOD**



WAYNE STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD

06/02/2020 - 05/06/2021