Teacher Professional Learning

Ignite Your Students' Interest in Science through Field Trips & STEM Role Models at the

BELLE ISLE AQUARIUM

ALL 5th Grade Teachers in DPSCD are Invited to Participate: 4-Day Summer Teacher Institute, Class Field Trips, and Follow-up Activities

APPLICATION DEADLINE:
March 31, 2018
ALL 5th Grade teachers in DPSCD are encouraged to participate!
SIGN UP NOW
even if you can't participate in this summer's institute.
ON-LINE REGISTRATION:
www.BIAquariumSTEM.org

4-Day Summer Teacher Institute

Teachers will be randomly selected to attend *one* 4-day Institute in 2018 or 2019, taking into account your availability.
The 2018 teacher institute will be: 8:30 am-3:30 pm, M-Th, July 16-19, 2018
Participating in a Summer Institute is required before bringing your class to the Belle Isle Aquarium.

National Science Foundation
WHERE DISCOVERIES BEGIN

For more information, contact:
Sandra Yarema, co-Project Director
Jeffrey Ram, co-Project Director
Wayne State University,
sandra.yarema@wayne.edu
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 class field trips and place-based learning activities.

How Teacher Participants Will Benefit:

1. Participate in a 4-day Summer Teacher Institute on Belle Isle in 2018 or 2019.
   a. Gain new knowledge and skills through presentations, hands-on activities, field trips, and lesson plan development.
   b. **Receive classroom supplies, activity guides, and other resources.**
   c. Receive **$800 for attending a summer institute**, $200 refresher and **up to $1100 total** in stipends for participation over 2 years.
   d. Choose to earn **24 SCECHs** OR **2 graduate credits** from Michigan Technological University at no additional cost, with completion of course requirements (assigned reading and preparation of lesson plans).
2. **Bring your class on a field trip to Belle Isle Aquarium (BIA)** to engage your students in scientific investigations, science career explorations, and hands-on activities.
3. Opportunities for **$500 grants** to develop classroom projects.

Program Requirements of Teacher Participants:

- Attend one 4-day Summer Institute on Belle Isle in 2018 or 2019.
  - ❑ The NSF project will assign which year
  - ❑ The Institutes are limited to 35 participants each, so **sign up early!**
  - ❑ **Sign up for the program NOW** and indicate your availability for each year.
- Bring one or more classes on a field trip to the Belle Isle Aquarium.
- Participate in research activities to assess teachers' and students' STEM interest, knowledge, and behavior. Participation in this project is voluntary.

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

BELLE ISLE CONSERVANCY

Michigan Technological University 1885

HEALTHY URBAN WATERS
sponsored by the Erb Family Foundation

Register on-line at **www.BIAquariumSTEM.org**
by March 31, 2018

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).

◊ Class Field Trips to Belle Isle Aquarium (BIA).

◊ Place-based learning activities related to the Aquarium—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 at Belle Isle Aquarium (July 16-19, 2018)

The Institute will meet Mon-Th, 8:30-3:30 pm. It is designed to enhance content knowledge and pedagogy skills of 5th grade classroom teachers to teach about aquatic systems (e.g., lakes and ponds on Belle Isle and at the Belle Isle Aquarium) via field trips, data collection and analysis, and hands-on activities. Science, social studies, math, language arts, and technology standards will be woven into the Institute, including discussions with experts and science career role models.

2017 summer institute

Field Trips to the Belle Isle Aquarium

Your students will dive into the 5th grade Next Generation Science Standard "Matter and Energy in Organisms and Ecosystems" both in our gallery and our ecosystems lab. Students design food webs utilizing our exhibit animals and explore the phenomena of how matter moves through an aquarium setting. Students will get their hands wet and dirty, literally, as they meet scavengers, decomposers, and invasive species and conduct water quality tests. During their field trip, students will also have the opportunity to meet our STEM professionals, ask questions and discuss job opportunities for their future.

For more information, contact:

Belle Isle Aquarium

Field Trip Program Coordinator:

Amy Emmert, Belle Isle Conservancy

emmerta@belleisleconservancy.org

Summer Institute Coordinator:

Joan Chadde, jchadde@mtu.edu

Michigan Technological Institute

Register on-line at www.BIAquariumSTEM.org by March 31, 2018

APPROVAL PERIOD

NOV 30 2017 JUN 29 2018

WAYNE STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD