# NSF INCLUDES Collaborative:

### Creating a Diverse STEM Pathway with Community Water Research



PI: Mohamad Musavi, Univ. of Maine; Co-PIs: Venkat Bhethanabotla, Univ. of South Florida; Lola Brown, City College of New York; Cary James, Bangor High School; Vemitra White, Mississippi State Univ.; Senior Investigators: David Pugalee, Univ. of North Carolina, Charlotte; Jeffrey Wilhelm, Boise State Univ; Alex Friess, Univ. of Maine; Laura Wilson, Univ. of Maine, 4-H Program





### Challenge

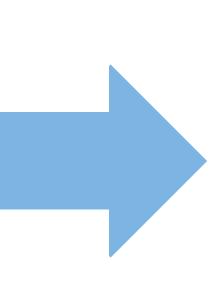
Gender and racial diversity in engineering and science

### Vision

Provide attractive project-based learning opportunities for underrepresented K-12 minorities in STEM

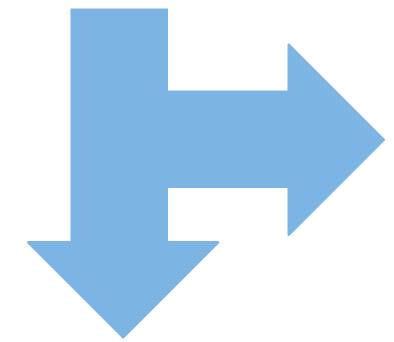
## Strategy

Choose global challenge









### Engage K-12 students in engineering and science practices

- Socially interesting
- Culturally important
- Economically valuable

Alliance

### Create

- Hands-on learning experiences
- Mentor relationships
- Diverse partner network
- Peer teaching opportunities

### 1 in 10 people

84%

of professionals

in U.S. science and

engineering jobs are

white or Asian males

— National Science Foundation

lack access to safe water

— World Health Organization



= \$4 economic return

— World Health Organization

## **Broad participation**

of New York

UNIVERSITY OF

SOUTH FLORIDA

MISSISSIPPI STATE

### **Evolving ecosystem for collective impact**

**Partners** 

