## The Ice-T Project



Member of the STEM PUSH Network, an NSF INCLUDES Alliance

In The Ice-T Project by The Citizen Science Lab, students get hands-on experience in alternative energy by designing and building their own Microbial Fuel Cells (MFC). By going through every step of the process, from culturing their own microbes, to physical construction of the fuel cell itself, students gain knowledge of basic laboratory, microbiology, and engineering techniques that they can apply in their academic and professional lives. Students also learn about a different scientist of color who's work affected their projects or the topics they are learning each week.

The Ice-T Project has been part of <u>The Citizen Science Lab</u> since 2016 and works with 14 students each year.

## Ice-T emphasizes & develops several targeted outcomes, including:

- Awareness of STEM opportunities and careers
- Confidence in STEM
- Ability to make connections between STEM and real world applications
- Laboratory based STEM Skills

Sudents demonstrate these skills through designing their own fuel cell, and comparing its energy output to other fuel cells and batteries.

#### **About STEM PUSH**

STEM PUSH, an NSF INCLUDES Alliance, is a national network of pre-college STEM programs who are engaging youth historically underrepresented in STEM to learn & do in-depth, authentic science, and ultimately to persist in STEM through college & beyond. More information available at stempushnetwork.org.

#### **Program Features**

# Microbiology & Reneweable Energy STEM Focus

hours per week throughout the school year

### Stipends paid

to each participant, up to \$1000

100% of students identify as Black or African American, and primarily from low income communities

#### **Program Results**

Alumni of the Ice-T Project have attended undergraduate institutions including:

- Duquesne University
- Pennsylvania State University
- Howard University
- Point Park University
- John Carroll University
- Indiana University of Pennsylvania

**Connect with The Ice-T Project!** 

Contact ICE-T at 814 830 3100 cslhq@thecitizensciencelab.org

thecitizensciencelab.org/ programs/ice-t-project