

INTRODUCTION

The Water-safety Education & training for High school, Undergraduate, & Graduate students (**WE-HUG**) program supports a vertical team of high school teachers, graduate students, undergraduate students, and high school students to **develop**, **test**, and **promote** water-safety education modules that can be used for both formal classroom teaching and informal demonstration in various occasions.

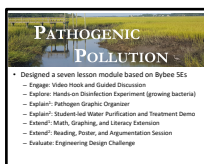
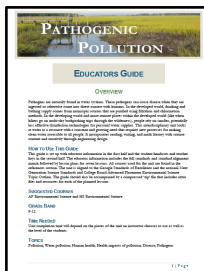
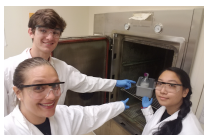
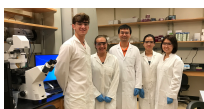
OBJECTIVES

- Enrich the high school curriculum with water-safety relevant components;
- Foster HUG students to be critical thinkers and problem solvers;
- Increase the diversity of HUG students in environmental careers.

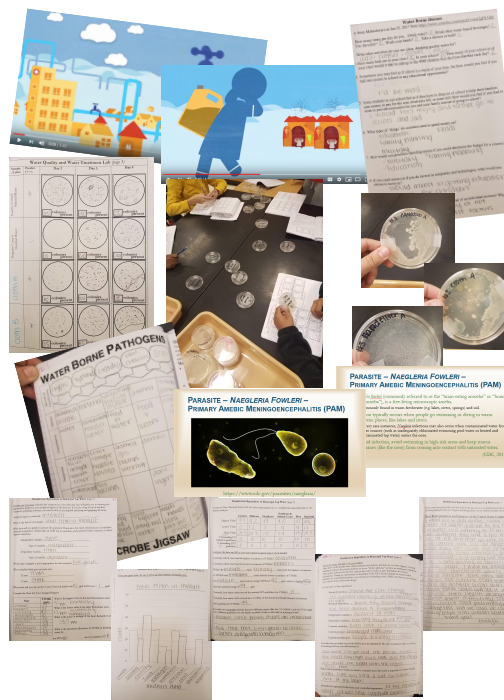
WHAT WE HAVE DONE

- **Started in June, 2018**
- **Team**
 - ❖ Chelsea Sexton, high school teacher
 - ❖ Cecilia Yu, graduate student
 - ❖ Jianfeng Zhou, graduate student
 - ❖ Will Formisano, high school student
- **Activities**
 - ❖ **Develop**
 - A 7-lesson unit plan, "Pathogenic Pollution"
 - June 11 - July 20, 2018 @ GT
 - ❖ **Test**
 - By Chelsea Sexton in her Environmental Science course
 - Nov 26-30, 2018 @ Kennesaw Mountain High School
 - About 20 students
 - ❖ **Promote**
 - Georgia Science Teachers Association Conference
 - February 14-16, 2019 @ Columbus, GA
 - About 30 high school teachers
 - A total of 11 teachers got the module and plan to use in a year

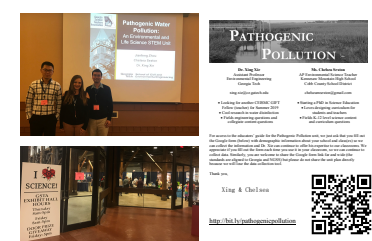
Develop



Test



Promote



- No. of high school teachers who plan to use the module in a year **11**
- Approximate No. of students who will benefit from this unit **996**
- Approximate No. of female students **525**
- Approximate No. of Latino/a students **162**
- Approximate No. of Black or African American students **401**
- Approximate No. of students on an IEP or a 504 **183**
- Approximate No. of English Language Learners in class **58**
- Approximate No. of students receiving gifted and talented servicing **255**

FIVE-YEAR PLAN

- Improve the course module (Years 1-5).
- Produce two videos (Year 1):
 - ❖ A: how pieces of the module are actually delivered
 - ❖ B: how to prepare the disinfection experiment module
- Build a designated website to share the developed module (Year 2).
- Develop interactive tools (e.g., a tablet application, interactive videos with integrated activities, or other recommended elements) to further advance and improve the module to be more seamlessly integrated into the K-12 classroom (Years 2&3).
- The instructors will not be limited to the GIFT teachers, but will include other interested environmental science teachers who will be provide with the documents, videos, supplies for conducting the disinfection experiment (Years 3-5).
- Organize a one-day workshop about the water-safety education at high schools (Year 5).

