

# **OBJECTIVES**

Discuss the purpose, organization, challenges and outcome of the outreach activities by the SACNAS chapter at UTSW:

- I. Beautifying Oak Cliff Cultural Center surroundings
- 2. Dallas STEM EXPO volunteering





# PURPOSE

- Oak Cliff Cultural Center
  - We wanted to do help our surrounding communities specially ones with low resources and minorities.
  - The cultural center has a similar mission of promoting diversity and inclusion within the arts and the Oak Cliff community.
- Dallas STEM EXPO
  - Spark interests in children and young students for learning basic science and show them that STEM careers can be fun and impactful.
  - Show children from all backgrounds that they have options and a voice in the scientific community.

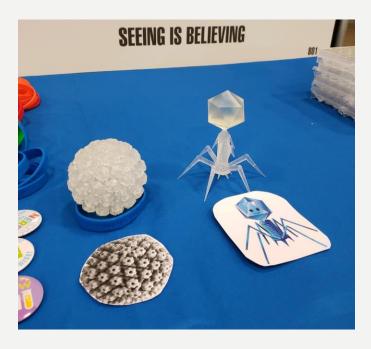
# PLANNING

- Oak Cliff Cultural Center
  - I contacted the program coordinator of the cultural center via email early when the year started with the interest of collaborating with them in any way.
  - For volunteers, we made the following flyer, as well as sending mass email to all students at UTSW.
  - Then, volunteer's sign-up at voly.org where location and description of the event were available.



# PLANNING

- Dallas STEM EXPO
  - Start organizing materials and volunteers 3 months in advanced.
  - Choose a fun name for the booth.
  - Acquire preparation protocols for easy experiments to do with the students.
  - Put in a funding request to Diversity and Inclusion Office. (Around \$350 including materials, souvenirs and décor)
  - Mass email students and postdocs at UTSW for volunteer opportunity.



# OUTCOME

- Oak Cliff Cultural Center
  - We were able to accomplish the clean up of back alley and parking lot in half a day.
  - We establish a connection with the Cultural Center for more collaborations to come.



# OUTCOME

- Dallas STEM EXPO
  - More than 1000 students during 2019 and 2020 were able to enjoy our interactive science booths.
  - Teachers from local schools reached out to collaborate for activities with their students.
  - Students were given flyers with information about internships.
  - Volunteers gain experience explaining science to non-scientist.



# CHALLENGES

- Oak Cliff Cultural Center
  - Advertisement had to be done several times for students to become interested.
  - This year the center is going through some budget cuts and activity planning have been affected by COVID-19.
- Dallas STEM EXPO
  - Planning for a big event like this is hard hence it needs to be started with enough time in anticipation.
  - Volunteer recruitment was somewhat challenging because they needed to be approved by the Dallas ISD (included background check)

### ADAPTING TO NEW ERA OF SOCIAL DISTANCING

- Have our executive members meeting using Microsoft Teams.
- For first-year students we left gift bags with Mexican candy and a letter from SACNAS as means of recruitment.
- We have started increasing our activity in social media (Instagram and Twitter).
- We will start having general meetings utilizing Gather. Town which is an interactive platform allowing better virtual communication for groups.
- We will be preparing virtual workshops about STEM careers for undergraduate students and high-school students at Dallas colleges and schools.
- We are planning a "Science from Home Day" in where we are providing science experiment kits to families from a local shelter.



# **EXAMPLE PROTOCOL**

### **Microbiology Station**

**Supplies:** Baby powder/Germglow, Purell, paper towels, dark box, hand blacklight flashlight. Examples of environment on LB plates (phone, keyboard, door knobs) Blowup pictures of different bacteria- printed on cardstock for example.

#### **Introduction:**

Show pictograph of all different types of bacteria in our environment and the agar plates from environment. Ask why is important to wash our hands. For how long people should be washing their hands?

### **Demo**

Lightly coat hands in GermGlo powder.

Look under dark box.

Alternatives: Made them wash their hands (Purrell) and repeat stem 1 and 2 to observe the difference before and after washing their hands.

### **Conclusions:**

Simple: Improper hand washing could make you sick. Advanced: Do they know why some bacteria make you ill?