



### John D. O'Bryant School

Since our founding in 2013, the Science Squad has worked closely with the teachers and staff of the John D. O'Bryant School of Math and Science in Roxbury. We re-established our relationship with O'Bryant following the departure of our original contact, forging a new relationship with AP Biology teacher Ms. Elizabeth Egan to provide tutoring help and assistance in class. We hope to expand this pilot program to other subjects in the future.

### Science Fair Judging

Since 2013, the Science Squad has partnered with various science fairs in the Boston regional area. This past year, we volunteered at the North Quincy High School science fair. We judged high school projects across a variety of disciplines, learning and testing the students on their ability to apply the scientific method.

### NEPTUN

We partnered with NEPTUN to teach classes on campus in the fall and spring semesters for high school students. Our classes covered topics in biology, ecology, physics, science communication, and chemistry. In the fall program WATERFALL, we offered four experiments: understanding animal thermal regulation by recreating whale "blubber", strawberry DNA extraction, edible aquifers and the effects of groundwater pollution, and oil spill cleanup. In the spring program SPLASH, we taught classes on invasive species, nucleation in soda, food spherification, and Write It Do It.

We surveyed the students after each class, and the top experiment from the Spring was food spherification. 23% of students had attended a Science Squad class in previous years and 100% of students said they were very likely to return to a Science Squad class.

### Next Steps

For the next year in Science Squad, we plan to seek out more science fair judging opportunities, to expand our science tutoring program at O'Bryant to other subjects, and to continue to deliver new and interesting NEPTUN classes that engage the attendees and get the students excited about science.



Food Spherification



Soda Nucleation



Edible Aquifers



Whale Blubber



Strawberry DNA