

ANNOUNCEMENT

## **Polluted or Clean? Students Examine NYC's Waterways: Unique Macaulay Honors College Program Immerses Brooklyn Tech Students in Pressing Environmental Issues**

### **Program Designed to Pique Interest in STEM Careers From Students of all Backgrounds**

June 25, 2014 –New York, NY – To build interest in science, technology, engineering and math (STEM) careers among students from a wide array of backgrounds, Macaulay Honors College is partnering with Brooklyn Tech, a specialized STEM high school with one of the City's most diverse student bodies, in a unique summer program focusing on pressing environmental issues facing New York City's waterways.

More than 30 Brooklyn Tech students led by oceanographer and Macaulay Seminar Professor Gillian Stewart will take to the field to sample and analyze water at the base of the Throgs Neck Bridge, in Flushing Bay, and in Meadow Lake in Corona Park. These Queens sampling sites represent the wide range of local waterways, and are intended to remind the students that NYC is a city surrounded by water.

One thing students will certainly find: contamination. Although widely fished by the local Flushing community, Meadow Lake is laden with heavy metals from nearby highways and also contains fly-ash sediment. In addition, snakeheads, an invasive species of fish which can travel over land from one water mass to another have made the lake their home. Nearby Flushing Bay is often contaminated with raw sewage and other pollutants that enter through combined sewage overflows after heavy rains. Each site presents students with robust research opportunities to gauge the environmental problems facing New York City residents and marine life.

“Within the rich natural and constructed lab of New York's waterways, students will learn how to approach scientific thinking and sampling and identify some of the most critical issues facing New York City,” said Professor Stewart. “By getting students into the water and then into the lab to analyze what they found, we hope to generate interest in STEM fields, with a special interest in environmental science and sustainability,” she added. Back in the classroom, students will use state of the art instruments to pinpoint both the improvements and threats to New York's waterways.

The two-week summer immersion program, which runs from June 30 thru July 10, is designed for Brooklyn Tech's rising juniors and seniors and will feature college-level lab and field work and assignments. To build momentum for future Macaulay Honors College students, the program will also feature a college planning workshop. Brooklyn Tech, the nation's largest high school and one of the most selective and prestigious in the City, is Macaulay's top feeder school.

Another critical goal of the program is to help diversify the path to STEM careers. "We have a dearth of scientists in the U.S., especially under-represented minority scientists," said Dr. Mary Pearl, Provost of Macaulay College. "We believe that providing students from a wide range of backgrounds an opportunity to get in the field and learn from a first-class oceanographer about critical environmental issues in their own backyard will pique their interest in pursuing a career in the sciences," added Dr. Pearl, who is also a biologist.

According to the National Science Foundation, African-Americans and Latinos each comprise 13% of the total workforce and only 3% of the technical workforce. Nearly 20% of the students participating in the Macaulay and Brooklyn Tech program are under-represented minority students.

"The life transforming learning experiences provided at Tech are well documented by the remarkable achievements of our esteemed alumni," said Brooklyn Tech Principal Randy Asher. Brooklyn Tech graduates "are in the vanguard of every industry. Among our graduates are Nobel Prize laureates, astronauts, corporate executives, distinguished scientists, engineers, and architects, as well as noted leaders in business, finance, industry, publishing, and the arts," he added.

#### **About Macaulay**

Macaulay Honors College at The City University of New York offers exceptional students a personalized education with access to the vast resources of the nation's largest urban university and New York City. Selected for their top high school records and leadership potential, Macaulay students receive a full-tuition scholarship, a laptop and technology support, and an Opportunities Fund to pursue global learning, research and service opportunities. Macaulay students enroll in one of eight CUNY senior colleges (Baruch, Brooklyn, City, Hunter, John Jay, Lehman, Queens, and Staten Island). [macaulay.cuny.edu](http://macaulay.cuny.edu).

#### **About Brooklyn Technical High School**

Brooklyn Tech is the nation's largest high school, with more than 5,300 students. Its Environmental Science Major, in conjunction with Advanced Placement Capstone, is a highly selective program and has created additional opportunities for students to engage in high level research. Rosemarie Mazzone, a dedicated environmental science guidance counselor, helped facilitate the partnership between Macaulay Honors College and Brooklyn Technical High School. The program at Brooklyn Technical High School is led by David Newman, assistant Principal of Social studies and environmental science, and Principal Randy Asher.

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