



Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

NEW YORK
HARBOR FOUNDATION

Billion Oyster Project STEM Collaboratory NYC® – A Teacher Fellowship at Pace University

FELLOWSHIP CONTRACT

The Billion Oyster Project Fellowship is a two-year professional development program that trains teachers and educators to engage their students in hands-on environmental science and restoration ecology in and around New York Harbor. This is a unique opportunity for teachers to work together with leading marine scientists and STEM professionals to transfer scientific knowledge directly to students historically underrepresented in STEM fields. BOP is a content-rich, place-based, experiential curriculum around the project of keystone species restoration. The project and the curriculum engages our city’s young people in the study and practice of ecological restoration and environmental stewardship. Through monthly colloquium style workshops with scientists, hands-on trainings, and annual symposia, scientists share content knowledge with teachers and teachers share pedagogy and curriculum expertise with scientists. BOP teacher-fellows are provided technical, material, and financial support with which to implement BOP curriculum in their classrooms and in the field. To support participation in all five pillars of the project, teachers are given an annual stipend of up to \$3,000 and schools receive up to \$2,000 per year for related expenses including additional monitoring supplies, books, transportation, substitute coverage, or advanced underwater equipment such as the OpenROV.

Below is an outline of the responsibilities for Teachers/Educators, School/Program Administrators, and BOP staff. Carefully read the text below then sign the contract on the last page.

Provided by BOP, Pace, and New York Harbor Foundation:

- Up to \$3,000 annual stipend for each participating teacher/educator
- \$2,000 annual subsidy for each participating school/program
- One graduate credit in science education from Pace University for each participating teacher/educator
- Support and one-on-one consultation from BOP curriculum specialist
- In-school visits from BOP coordinator for recruitment and outreach
- Waterfront Site; permits, access, and coordination with property owner
- Restoration Station, including: live oysters, supplies and hardware, water quality test kits, BOP field science manual (student and teacher versions), additional supplies and equipment as needed
- Full access to digital platform, including curriculum, ORS data, events, and research
- Certificate of Participation and Promotional Posters for school and classrooms
- Access to project evaluation and research results

Responsibility of Teachers:

- Complete all required activities (underlined):

Activities	Year One Fellows	Year Two Fellows
Scientist Workshops: 5:30-7:30, One Tuesday per month @ Pace	<u>Attend all nine workshops</u> (5-Spring, 4-Fall)	Optional
BOP Curriculum PDs: 5:30-7:30, One Tuesday per month @ Pace	<u>Attend three or more PDs including</u> 2 Symposium Preps	<u>Attend three or more PDs</u>
Spring and Fall Field Training Days 9:00am-4:00pm, Saturdays, @ Governors Island	<u>Attend three field training days</u>	Optional
Annual BOP Symposium: June 23, 2017 10:00am-3:00pm	<u>Fellows must attend</u> , students are optional	<u>Fellows attend with 10 or more</u> <u>students to present research projects</u>
Oyster Restoration Station (ORS) Monitoring Trips	<u>Two in the Fall</u>	<u>Two in the Fall, two in the Spring</u>
Pace STEM Collaboratory Showcase	Optional	<u>Attend</u>
Aquarium and Reef Exhibit Field Trips	Optional	Optional
Video Synopsis and Personal Reflection	N/A	<u>Submit Video and Written Reflection by</u> <u>January 15th</u>

- Teach students BOP field science protocols
- Take four ORS monitoring trips per year with select groups of students
- Enable students to sign up and operate BOP digital platform as “team members”
- Implement BOP curriculum in your classroom and in the field
- Provide feedback on BOP curriculum using the digital platform
- Engage other teachers and school community in BOP
- Take one field trip per year to The River Project or other partner institutions (optional)
- Establish links between BOP classroom and afterschool programming in the same building (when possible)
- Participate in all teacher evaluation and research activities including classroom and field observations, pre/post knowledge assessments, and surveys
- Help facilitate student evaluation and research activities including identifying participant and control student groups and ensuring that all students have signed consent forms
- Project Ambassador - actively engage in project related events to promote the work

