**Workshop Descriptions**

**Gene Pool**
Discover the connection between mathematics and genetics.

- *Meredith Ascher, Queens High School for the Sciences*
- *Emily DiLillo, Walt Whitman High School*

**Gone Fishing**
Learn how scientists use mathematics to estimate the population of fish in a pond.

- *Laila Chaudhry; Dayoung Lim, Flushing High School; William Saam, East Meadow High School/ Woodland Middle School*

**The Power of LOGs**
Learn the fundamentals of logarithms with a unique hands-on approach using LOG manipulatives.

- *Andy Davidson, FiCycle: Financial Life Cycle Education*

**Decrypt & Decipher**
Use frequency analysis to decipher encrypted messages.

- *Ryan Fox, Maspeth High School*

**Embrace the Unknown**
Participants will be exposed to extensions of high school mathematics concepts with sometimes surprising, but always fascinating, results.

- *Robert Gerver, Ph.D., North Shore High School, retired*

**Roller Coaster Creator**
Learn about the parameters of trigonometric functions to create a roller coaster.

- *Brandon Inhaber, Dao Lei & Ruby Mercure, New Explorations into Science, Technology and Math High School*

**Catch the Culprit!**
A crime has taken place! Create a model to narrow down the list of suspects and use mathematics to solve the mystery.

- *Sabrina Joseph, Pan American International High School*

**Taxi Geometry**
Investigate another way to measure distance based on the Manhattan street grid.

- *Sheila Krilov, Hunter College High School and Math for America*
The Magic of Counting  PH 156
Classical mathematical problems never fail to dazzle us. Discover new ways of counting and proving various formulae.
-Eliza Kuberska, Hunter College High School

The Irrational Hippasus and the Pythagoreans  PH 114
Look back in time to Ancient Greece, the Pythagoreans, and the life of Hippasus. Discover the need for irrational numbers and learn about Hippasus’ reward for creating them.
-Tallin Lamonaca, Louis Armstrong Middle School

Geometric Tangles  PH 115
Create beautiful geometrical puzzles which demonstrate the richness of structure found in the mathematical world.
-Amy Lee, Queens High School for Language Studies and Math for America

Green Globs  PH 008
Use technology to test your knowledge of functions as you try to maximize your team score.
-Yuting Li, New Utrecht High School

James Suescun, Urban Assembly School for Global Commerce

Pizza Party!  PH 157
Discover the Pizza Numbers and explore the interesting properties of this sequence in relation to patterns, functions, and number theory.
-Alexander Lord, Francis Lewis High School, Queens College, and Math for America

To Confess or Not to Confess  PH 119
Investigate winning strategies of several games in this hands-on workshop.
-Meghan Morrissey & Roman Suleymanov, John Adams High School

The Price is Right!  PH 110
Not too high, not too low: Learn how math is used to find just the right price to charge your customers.
-Ashwin Ramanathan, Jamaica Gateway to the Sciences

The 12 Most Controversial Facts in Mathematics  PH 108
If you're looking for a mathematical way to impress your friends and beguile your enemies, here’s a good place to start. Explore proofs that are outstandingly controversial among students of mathematics but are nonetheless correct.
-Michael Riccardo, Bayside High School and Math for America

Teacher Sessions

Session I: More with Jim  PH 151
Meet the keynote speaker for a Q&A.
-Jim Matthews, Siena College

Session II: Teacher’s Choice!
Attend the workshop of your choice.