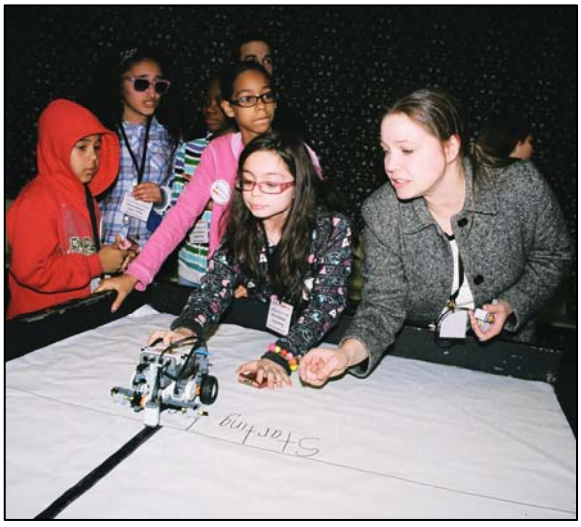
Second Annual Robotics Scrimmage

The New York Academy of Sciences and the Department of Youth and Community Development (DYCD) are pleased to announce the success of our second annual *FIRST* LEGO League Robotics Scrimmage! Held on March 10, 2012, 15 teams from across the City gathered at the Academy's headquarters to compete in a series of challenges. Of these, 10 teams were from afterschool programs participating in the Academy's **Afterschool STEM Mentoring Program**, which matches young scientist with afterschool programs to provide mentoring and hands-on instruction in science, technology, engineering, and math. The theme of this year's scrimmage was *Food Factor*, which focused on the challenges of keeping food safe and contamination-free as it makes its journey to consumers.

The teams competed in up to four challenges:

The Food Factor Robot Game: The team's robots competed on a specially built mat that highlights the journey from "farm to table" for common foods such as fish, pizza, ice cream, and produce. The team's robots had to put these foods through few of the steps required to travel to consumers, with a focus on avoiding contamination.

The Skills Challenge: This challenge was developed by the Academy's K-12 Education team, and is not directly connected to the *Food Factor* theme. In the skills challenge, teams were given two minutes to complete a series of missions that required them to use their science and engineering skills.



The Robot Runway: This is a simplified robotics challenge, also designed by the Academy's K-12 Education team, to allow teams to compete that may not have the engineering experience required for the *Food Factor* Robot Game. On a specially designed mat, the team's robots must move down a 15 foot long and 2 feet wide "runway", execute a 180-degree turn, and return to the starting line.

The *Food Factor* Research Project: For this challenge, teams are challenges to identify a problem that may arise in the process of getting food to our plates, study the factors impacting this challenge, and devise a novel solution remedy it. Teams presented their research and solutions to a panel of scientists, engineers, and industry representatives from the Academy's board and partner organizations.

In the Research Project, teams presented ideas that ranged from designing a spinning UV-sterilized vegetable wash system to presenting a prototype of a conveyer belt that sorts oysters based on freshness. The winning solution to the challenge was presented by the "Lego Chicks," an all-girls team that developed the blueprints and operational plan for building a mobile greenhouse to reduce the time and energy required to transport food from the farm to the consumer (see their prototype below). In addition to the prizes awarded for the challenges, awards were granted for the participant's amazing team spirit.

Thanks to the hard work of all of the scrimmage's competitors, the support of their families and friends, and the dedication of our judges, the Academy's second annual Robotics Scrimmages provided another exciting and engaging outgrowth of the **Afterschool STEM Mentoring Program**. We hope that robotics and engineering will continue to be an area of interest and creativity at the Academy, and look forward to next year's scrimmage!

The 2012 Robotics Scrimmage Team Roster

Team Name	Team Home
Bronx Brilliant Engineering	**Marble Hill Community Center**
Bronx Task Force	**Good Shepherd Services**
Chapin Bots – Team 1	The Chapin School
Chapin Bots – Team 2	The Chapin School
Darwin	**Goodwill, Beacon I.S. 10**
GearHawks	P.S. 399
Germ Busters	**The Children's Aid Society Patria Mirabal Afterschool Program**
HCZ Bots	**Harlem Children's Zone P.S. 242**
Lego Chicks	Girl Scouts Nassau County
The Newtons	**University Settlement Beacon Program**
P.S. 166 Robotics Club	**Jacob A. Riis Neighborhood Settlement**
Robo-HCZ	**Harlem Children's Zone Promise Academy**
RoboRocket	RoboMindTech Science & Technology Center
The SUMA PUMAs	**The Children's Aid Society Salomé Ureña Campus**
Team Evolution	**Young Athletes OST Program**

Bold = Afterschool STEM Mentoring Program team

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