2009 NYC ISEF Finalists

The following are the names of the NYCSEF finalists who have been selected to represent New York City at the Intel International Science and Engineering Fair in Reno, NV from May 10-15, 2009.

Individual Projects:

**Kevin Chen (Physics)**  
High School: Manhattan Center for Science & Mathematics  
Project Title: The Effect of Circularly Polarized Light vs. Linearly Polarized Light on the Fluorescence of Quantum Dots Buried at Various Depths in a Polymer Matrix  
Mentor: Dr. Manuel Zevallos – City College of New York

**Andrew Cohen (Chemistry)**  
High School: Columbia Grammar and Preparatory School  
Project Title: Fourier Transform Infrared Spectroscopy Analysis of Oxidative Degradation of Ethyl Levulinate, A Novel and Promising Non-Food Source Biofuel  
Mentor: Dr. Thomas Butcher – Brookhaven National Laboratories

**Angi Guo (Biochemistry)**  
High School: Stuyvesant High School  
Project Title: The Discovery of Mechanism of Action of A Small Anti-HIV Compound ADS-J1  
Mentor: Dr. Shibo Jiang – NY Blood Center

**Hamaad Hassan (Physics)**  
High School: Sheepshead Bay High School  
Project Title: Study of 'Three-dimensional' Random Closed Packing of Spheres  
Mentor: Dr. Shomeek Mukhopadhyay – City College of New York

**Can Hu (Medicine and Health Sciences)**  
High School: Bronx High School of Science  
Project Title: Trophic and Protective Effects of Shh on Dopaminergic and Cholinergic Neurons in the Nigrostriatal Pathway  
Mentor: Dr. Luis Gonzalez – Columbia University

**Niloy Iqbal (Cellular & Molecular Biology)**  
High School: Stuyvesant High School  
Project Title: Androgen Receptor Signaling in Mammary Cancer Cells: A New Approach to Chemotherapy for Breast Cancer Tumors Lacking Estrogen Receptors  
Mentor: Dr. Susan Logan – New York University School of Medicine

**Kemakorn Ithisuphalap (Chemistry)**  
High School: Manhattan International High School  
Project Title: Synthesis of Zirconium Phthalocyanine and Hafnium Phthalocyanine
Mentor: Dr. Charles Drain – Hunter College

Tanvir Jahan (Physics)
High School: Bronx High School of Science
Project Title: All-Solid-State Ultraviolet Laser for LASIK Surgery
Mentor: Dr. Matthias Lenzner – City College of New York

Michael Kaplan (Biochemistry)
High School: Bronx High School of Science
Project Title: Computational Modeling of the Quantum Mechanical Excitations in a Light Harvesting Complex in Purple Bacteria
Mentor: Dr. SeogJhoo Jang – Queens College

April Lee (Plant Sciences)
High School: Stuyvesant High School
Project Title: Using a Genetic Screen, Homozygous Knockouts, and an Auxin Concentration Curve to Explore the Roles of Glutamate Receptors in the Morphology and Signaling Pathways of Arabidopsis Thaliana
Mentor: Dr. Eric Brenner – NY Botanical Gardens

Sadik Uddin (Animal Sciences)
High School: Townsend Harris High School @ Queens College
Project Title: The Effects of Euschistus servus on Regulating Leptinotarsa decemlineata
Mentor: Dr. Mitchell Baker – Queens College

Qi Fan Zhang (Cellular & Molecular Biology)
High School: Stuyvesant High School
Project Title: Overexpression of BubR1 Can Produce Aneuploidy in Human Cells
Mentor: Dr. Yinghui Mao – Columbia University

Team Projects:

Gabriella Baldwin and Milana Fuzaylova (Environmental Sciences)
High School: Forest Hills High School
Project Title: Antioxidants in Green Tea and their Effects on Diminishing Tumor Growth in Helanthius Annus
Mentor: Mr. Karl Hoffman – Forest Hills High School

Oliver Chan, James Leung and Cheryl Wu (Engineering)
High School: Stuyvesant High School
Project Title: Low Resistance Magnetic Coils for Plasma Confinement
Mentor: Mr. Scott Thomas – Stuyvesant High School

Tenzing Tsomo and Tiffany Yau (Earth and Planetary Sciences)
High School: Francis Lewis High School and Stuyvesant High School
Project Title: Dating the Aterian Culture in North Africa: ESR Analyses at Grotte de Contrebandiers, Morocco
Mentor: Dr. Bonnie Blackwell – Williams College