

Charles Duggan LISEF 2009 Grand Award Winners

All First Place Winners Win an All Expense Paid Trip to ISEF 2009

| | Trip to ISEF 2009 | | | |
|------------------------------------|--------------------------------|-----------------------|--|---|
| | Award | Name | School | Title |
| Animal/ Plant Sciences | First | Alyssa Ehrlich | South Side High School | The Effect of the Adipose60 Mutation on the Locomotion and Metabolic Rate of Wild Type and Vestigial Winged Drosophila melanogaster |
| | Second | Matthew Chu Cheong | General Douglas MacArthur High School | The Modulation of a Feeding Novelty in Rainbow Trout, Oncorhynchus mykiss: Is there a Prey-Size Effect? |
| | Third | Sangmi Ahn | Plainview Old Bethpage JFK High School | Factors impacting incomplete penetrance of balloon-wings in D. melanogaster |
| | Honorable Mention | Michelle Bowers | Massapequa High School | Modeling Tree Root Deflection and Tensile Force on a Winkler Foundation |
| | Award | Name | School | Title |
| | Trisha Nussba First Geetika R | Nicole Goldbaum | Plainview Old Bethpage JFK High School | The Impact of Grade- Level and Gender on High-School Students Self-Regulated Learning Strategies |
| Behavior and Social Sciences | | Trisha Nussbaum | Roslyn High School | How Harry Potter Can Help You Get a Higher SAT Score: The Effects of Context and Familiarity on Vocabulary Retention in Adolescents |
| | | Geetika Rudra | Roslyn High School | How Scary is Too Scary? The Effect of Fear Appeals in Political Advertising |
| | | Gabrielle Young | Valley Stream South High School | Examining the clinical Utility of the RBans in spanish speakers with Epilepsy |
| | Second | Kristen Archibald | Lawrence High School | "Familiarity Breeds Respect: Evaluating Attitudes Toward |

| | | | | Autiotic Children" |
|--|----------------------|---------------------|--|---|
| | | | | Autistic Children" The Power of Influence: |
| | | Rachel Bass | Roslyn High School | How Even A Novel Stereotype Can Impact Vocabulary Performance |
| | | Melanie Graber | William A. Shine Great Neck South High School | The Impact of School Transitions on Eleven year olds |
| | | Julie Steinberg | Bellmore John F Kennedy High School | The Effectiveness of Listening to Familiar Music versus Nature Sounds as a Mode of Pain Management |
| | | Hyun Kyoung Cho | William A. Shine Great Neck South High School | Conceptual Priming and Emotion |
| | | Matthew Glickman | Roslyn High School | Two Views of Leadership: One Doubtful Scale |
| | Third | Mallory Gold | Lawrence High School | Body Image Among Adolescent Dancers And Their Nondancer Peers |
| | | Michael Sullivan | General Douglas MacArthur High School | Red & Yellow – Black & White: Evaluating the Effectiveness of English Football's Anti-Racism programs by Examining Referee Disciplinary Behavior, 2004-2007 |
| | | Rani | Syosset High | Realization of Sarcasm |
| | | Chudasama | School | in Young Children |
| | | Olivia Levine | Bellmore John F Kennedy High School | Trans-pat, a 5-HT2a antagonist and 5-HT2C agonist, is a novel antipsychotic and appetite suppressant |
| | Honorable Mention | Eliza Uster | Lawrence High School | The effect of character traits and personality on adolescents serving as mock jurors |
| | | Mark Van Name | Wellington C. Mepham High School | The Nature of Organic Foods: Consumers' Perceived Knowledge and Purchasing Behaviors of Organic Products in an Inflationary Economy |
| | | Samuel Vitello | Roslyn High | The Effect of Using |
| | | | | |

| | | | School | Humor, False Accusation, or Decrial of Negativity to Combat Character Attacking Political Attacks |
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| Biochemistry | Award First | Name Steven Ham | School Herricks High School | Title Exploring the Effects of Nicotine on the Expression of Molecular Compounds Associated with Alzheimer |
| | Second | Fabian Ortega | Farmingdale High School | The Role of Proteins Critical in Membrane Formation During the Sporulation of the Yeast Saccharomyces cerevisiae |
| | Third | Michael Commesso | Patchogue Medford High School | The Explanation of 5- Hydroxytryptamine's Gender-Based, Antipodal Response to Endurance Exercise in Humans |
| | Honorable Mention | Aurora Parlagreco | Wellington C. Mepham High School | Enzymes in Art Conservation and Restoration |
| | | | | |
| | Award | Name | School | Title |
| | Award First | Name Jason Littman | | |
| | | | School Plainview Old Bethpage JFK | Title The Carcinogenesis and Invasiveness of Hepatocellular Carcinoma with IQGAP2 siRNA |
| Cellular and Molecular Biology/ Microbiology | | Jason Littman Odochi | Plainview Old Bethpage JFK High School Lawrence High | Title The Carcinogenesis and Invasiveness of Hepatocellular Carcinoma with IQGAP2 siRNA Transfection AML1-MTG16 Chimeric Fusion Leads to Myeloid Differentiation |
| Molecular Biology/ | First | Jason Littman Odochi Uwazurike Christine | Plainview Old Bethpage JFK High School Lawrence High School Ward Melville | Title The Carcinogenesis and Invasiveness of Hepatocellular Carcinoma with IQGAP2 siRNA Transfection AML1-MTG16 Chimeric Fusion Leads to Myeloid Differentiation Arrest Effects of Lid Dynamics on the Binding of MDM2 to the Tumor Suppressor Protein p53: Implications for |

| | | | | Engineered Vascular Grafts |
|-----------|--------------------------------------|--------------------------|--|--|
| | | Jacob Spiegel | Wellington C. Mepham High School | The Hereditary Basis of Taste: Identification of TAS2R43 Gene |
| | | Julia Goldberg | Half Hollow Hills High School East | Expression of C1q Membrane Receptor gC1q-R/p33 on Peripheral Blood Leukocytes |
| | Honorable Mention | Bryan Tan | East Islip High School | Modulation of Apoptosis by the Parasite Perkinsus marinus Involves Reactive Oxygen Species |
| | | Catherina Yang | Syosset High School | Characterization of Novel Sigma-2 Receptor Ligands for Cytotoxicity in Tumor Cells |
| | | Alice Yau | Syosset High School | The Effect of Cyclin- Dependent Kinase 5 on Amyloidβ-42 Toxicity in Drosophila melanogaster |
| | Award | Name | School | Title |
| | First | Preya Shah | Ward Melville High School | Combating Cancer: Design and Synthesis of Dual-Warhead Tumor-Targeting Drug Conjugates |
| | Second | Katherine Zhu | Plainview Old Bethpage JFK High School | Electrospun PLLA-PEG Multiblock Copolymer For Anti-Adhesion |
| Chemistry | Chemistry | Jing Jian | Lynbrook High School | The Effect of Unsaturated Fatty Acid Esters on the Stability of Precorneal Tear Film Lipid Layer in Meibomian Gland Dysfunction Patients |
| | Hamanakla | Valentina Semenova | Paul D. Schreiber High School | Light –Induced Water Oxidation Catalyzed by Cobalt Hydroxides Immobilized on Silica Nanoparticles |
| | Honorable Mention Michael Yang | Oceanside High School | Improving Mechanical Properties of Ultra-High Molecular Weight Polyethylene with Ionic Liquid/Carbon Nanofiber | |

| | Award | Name | School | Title |
|---|-----------|----------------------|---|--|
| Computer Science/ Mathematical | First | Jason Gross | Commack High School | An Investigation of the Closure of the Set of Singleton Sets of Natural Numbers under ∪, ∩, ‾, +, x |
| Science | Second | Christopher Lando | The Wheatley School | A Theory on Distortions of Unfolded n- dimensional Cubes |
| | Third | Ronnie Instrella | Oceanside High School | A Case Study on Beal |
| | Award | Name | School | Title |
| | First | Sarah Ditchek | North Shore Hebrew Academy High School | Use of Sea Surface Pressure to Predict Hurricane Path Recurvature |
| Earth & | Second | Joel Goldman | Bellmore John F Kennedy High School | Carbon Dioxide Sequestration in Deep- Sea Sediment: The Potential Applications of Hydraulic Fatigue in Addressing Global Environmental and Energy Challenges |
| Planetary Sciences/ Environmental | Third | Jessica Noviello | Smithtown High School West | Morphometric Analysis of Extinct Malagasy Crocodyliform Teeth |
| Management | Honorable | Daniel Bornstein | Bellmore John F Kennedy High School | Intercropping Soybeans With Red Clover: An Approach For More Efficient Agricultural Resource Management In Emerging Asia And Sub-Saharan Africa |
| | Mention | Aria Koumourdas | Bellmore John F Kennedy High School | The Development of Site Specific Fresnel Lens and Photovoltaic Cell Systems for Building Integrated Solutions |
| | Award | Name | School | Title |
| Engineering: Electrical & Mechanical/ Engineering: Materials & Bioengineering | First | Karson Miller | John L. Miller Great Neck North High School | Automated Wired Equivalent Privacy and RC4 Encryption Protection Through 802.11 Wireless Packet Injection |
| | Second | Neil Patel | Herricks High School | The Mechanical Enhancement of Electrospun Fibers with Polyhedral Oligomeric |

| | | | | Silsesquioxanes |
|--|----------------------|----------------------|---------------------------------------|--|
| | Third | Arielle Scardino | Kings Park High School | A Semi-Quantitative Analysis of Mitochondrial Gene Expression in the Caenorhabditis elegan Strain UNC-22 |
| | | Sharif Vakili | The Wheatley School | The Effect of Laser Therapy on Trombiculid Bite Removal |
| | Honorable Mention | Jasmine Varughese | Elmont Memorial High School | Effects of Glutamic Acid, Glycerol and Citric Acid on λ-Poly(glutamic acid) Formation by Bacillus licheniformis ATCC 9945a |
| | Award | Name | School | Title |
| | First | Glen Meyerowitz | Northport High School | Uncovering Elusive Ultra High Energy Particles: Development of A Method For Cosmic Ray Detection |
| | Second | Brett Morris | Half Hollow Hills High School East | Examining The Point Spread Function Of A Candidate Charge Coupled Device For The Lsst With An Optical Point Projector |
| Energy & Transportation/ Physics and Astronomy | Third | Jonathan Hanna | West Hempstead High School | Air Currents into Electric Currents: The Automotive Air Flow Powered Battery Charger |
| | | Ivan Govea | Brentwood High School | The Efficiency of Group I Alkalai Metal Hydroxides on Biodisel Catalysis |
| | Honorable Mention | Emily Weinstock | Paul D. Schreiber High School | Finding the Modes of Electromagnetic Oscillation in a Random Sample |
| | | Yuanchi Zhao | Ward Melville High School | Implementing Thermal Feedback Control of a Helium-Neon Laser for Frequency Stabilization |
| | Award | Name | School | Title |
| Environmental Sciences/ | First | Amy Van Scoyoc | East Hampton High School | Investigating Epigenetics: Methylation and Pollution-Induced Gene |

| | | | | Expression in the Invertebrate Dugesia Tigrina |
|----------------------|----------------------|------------------------|--------------------------------|--|
| | Second | Korie Bush | Uniondale High School | Fight against Late Blight: Ant Pheromone as a Natural Fungicide |
| | Third | Samantha Boniberger | West Islip High School | The Effects of Common NSAIDs on Isochysis galbana and Tetraselmis |
| | Honorable Mention | Nicole Franco | Brentwood High School | Selenite Interaction with Mercuric chloride an Investigation on Uptake and Toxicity in Phytoplankton |
| | Award | Name | School | Title |
| | | Jourdan Urbach | Roslyn High School | Super Oligodendrocytes: Remyelinating MS Lesions Using Laminin and Immunomodulators |
| | First | Stephanie Wang | Roslyn High School | The Novel Property of the Circulating Hormone AM and Its Binding Protein: Neuroprotection in Hypoxia |
| Medicine & Health | Second | Maritza Lagunas | H. Frank Carey High School | Evaluation of Benzalkonium Chloride (BAK) and Phormia regina Peptide Isolates on Ocular Surface Cells via MTT Cytotoxicity Assay |
| Sciences | | Winston Waters II | Elmont Memorial High School | The Dominant Negative Effect in VHL-positive cells |
| | | Peter Kahng | Northport High School | A Novel Immunoreactivity Assay for Protective Antigen on Nano-Composite Transdermal Anthrax Vaccine |
| | Third | Jung Kim | Kings Park High School | The Upregulation of Connexin 43 Expression in Cardiomyocytes Co- cultured with Skeletal Myoblasts or Mesenchymal Stem Cells Utilizing Sodium |

| | | | | 4-Phenylbutyrate in Cellular | |
|--------------------|----------------------|---|--|--|---|
| | | | | Cardiomyoplasty | |
| | | Justin Arnett | Paul D. Schreiber High School | Detecting Glaucoma Most Reliably and Efficiently by Assessing Neuroretinal Concavity | |
| | | Brendan Dillon | Bellmore John F Kennedy High School | VEGFR-2 Surface and mRNA Expression Upon VEGF Stimulation of HUVEC | |
| | | Vivian Emengo | Sachem High School East | Escherichia coli increases Frequency and Size of Renal Calculi in an in vitro Study of Kidney Stone Formation | |
| | Honorable Mention | Melis Emre | Paul D. Schreiber High School | Role of Tartrate- Resistant Acid Phosphatase and Cytokines in Gaucher Disease | |
| | | | Alex Kamath | Chaminade High School | Long-Chain Fatty Acids Regulate IL-6 Induced STAT3 Activation and Chemokine Expression by Endothelial Cells |
| | | | William Marsiglia | Sachem High School East | Reduction of Inflammation Increases Regeneration Rate in Lumbriculus variegatus |
| | | Sowmya Sundaresh | Hicksville Senior High School | Apoptosis Effect of Coated Nanoparticles: An Ideal Approach to Target Breast Cancer | |
| | Award | Name | School | Title | |
| | Teams First | Aakash Abbi and Pragya Kakani | Hicksville Senior High School/Jericho High School | A Microarray Based Rna In Situ Hybridization Screen For Novel Cell Adhesion Genes in Cerebellar Basket and Stellate Interneurons | |
| Teams _F | | Hannah Berkowitz and Jackie Bokor | Long Beach High School | The impact of abscisic acid on the sequestration of metals by euglena gracilis | |
| | | Cole Blum and Samantha Larsen | Long Beach High School | Sunscreen: A Catch 22 Blocking of the photocatalytic activity of titanium dioxide nanoparticles by | |

| | | | | polymer coating |
|--|--------|----------------------------|--|--|
| | | Megan Garber, | North Shore | Engineering a Chip |
| | | Ashley Khalili | Hebrew | Based Biosensor for |
| | | and Daniel | Academy High | Proteins and |
| | | Younger | School | Phosphates |
| | | | | Evaluating the Effects |
| | | | | of Environmental Toxin |
| | | Celline Kim | Manhasset High | 4-Nonylphenol and |
| | | and Esop Baek | School | estrogen On U937 Human Immune Cells |
| | | | | Using Microarray |
| | | | | Analysis |
| | | | | The Effects of Long |
| | | Peter H. | | Term Depression on the |
| | | Massey and | Manhasset High | Development and |
| | | Shaunak | School | Progression of |
| | | Bakshi | | Alzheimer's Disease in |
| | | | | a Drosophila Model |
| | | Shalini | Commack High | Toward Novel |
| | | Pammal and | School/ | Antimicrobial Drug |
| | | Samantha | Plainview Old | Discovery Targeting |
| | | McKenna | Bethpage JFK | Cell Division |
| | | | High School | The Effects of Electric |
| | | Taryn | | Shock on the |
| | | Wassmer and | Manhasset High | Biosynthesis of Plant |
| | | Jonathan Gillis | School | Secondary Metabolites |
| | | | | in Pisum sativum |
| | | | Lawrence High | |
| | | Paul Masih | School/ | The effect of dental |
| | | Das, Nicholas | Plainview Old | product nanoparticles |
| | | Mulchan and Rida Malick | Bethpage JFK High School /Lawrence High School | tio2 and zno on dental |
| | | | | pulp stem cells and mc- 3t3 osteoblasts |
| | | | | 313 Osteobiasis |
| | | | | Reactivating muscle |
| | | Danielle Fong | Half Hollow Hills | cells through the |
| | | and Theodora | High School | reversal of |
| | | Efthymiou | West | differentiation |
| | Second | | Herricks High | The Effect of Electric |
| | | Sanchita | School/ | and Magnetic Fields on |
| | | Singal and | Plainview Old | Protein Self- |
| | | Lara Fourman | Bethpage JFK | Organization and Osteoblast |
| | | | High School | Biomineralization |
| | | | | Analysis of Three Airlift |
| | | | Bioreactors to Enhance | |
| | | Jeffrey Yau | Manhagast High | Energy Yield and |
| | | and Christina | Manhasset High School | Growth of |
| | | George | 3011001 | Schizochytrium |
| | | Ĭ | | limacinum and |
| | | | | C.reinhardtii |

| | | Jonathan Nachman and Daniel Fourman | North Shore Hebrew Academy High School/Ward Melville High School | Development of a Chemical Mechanism to Stabilize Methane Hydrates and Harness Sub-Ocean Natural Gas Reserves |
|--|-----------|---|--|--|
| | Third | Maxwell Plaut and Jaclyn Schein | Rambam Mesivta High School/Hebrew Academy Of Five Towns And Rockaways (HAFTR) | Increasing Polymer Compatibility of Binary and Ternary Polymer Blend Thin Films at Confined Surfaces |
| | | Shane Silpe and Robert Levokove | Long Beach High School | Controlling the navigation of Daphnia magna with the facilitations of magnetic bacteria and magnetic stimuli through a artificial fluid system |
| | | Tobi Simon, Shanna Savignano and Diana Antonio | Manhasset High School | Tobi Simon |
| | | Nabil Ahmed and Rohan Gheewala | Herricks High School | A Novel Application of the CVL for Tissue Welding and Soldering |
| | | Rachelle Ludwick and Byron Smith | Half Hollow Hills High School West/Chaminade High School | The Effects of Supercritical Carbon Dioxide and Nanoclays on Tri-Blend Polymer Composites |
| | Honorable | Michael Luke and Rohit Khullar | Plainview Old Bethpage JFK High School /Paul D. Schreiber High School | The Role of the Hepatocyte Growth Factor and Interferon Inducible Protein 10 in the Prevention of Preterm Delivery |
| | Mention | Mathew Sabu and Justin Mathew | Elmont Memorial High School | The Effects of Anacardic acids of Pelagronium x horturum on Acrythosiphon pisum |
| | | Alexander Scaramucci and Nicholas Dipreta | Manhasset High School | Evaluation of Blackhole Mass to AGN Intensity in Selected Spitzer and Radio Telescope Targets |
| | | Solomon Swartz and Esther Lee | North Shore Hebrew Academy High School/Jericho | Sustained release of lidocaine via Thermoresponsive hydrogel and co-axial |

| | | High School | electrospun nanofibers |
|---|---------|-------------------|------------------------|
| | | | Uncovering |
| | nie Zhu | Half Hollow Hills | Interneuronal Genetic |
| | d Jason | High School | Pathways Through |
| H | Rudin | West | Partial Correlation |
| | | | Network Analysis |