REGENERON

SCIENCE
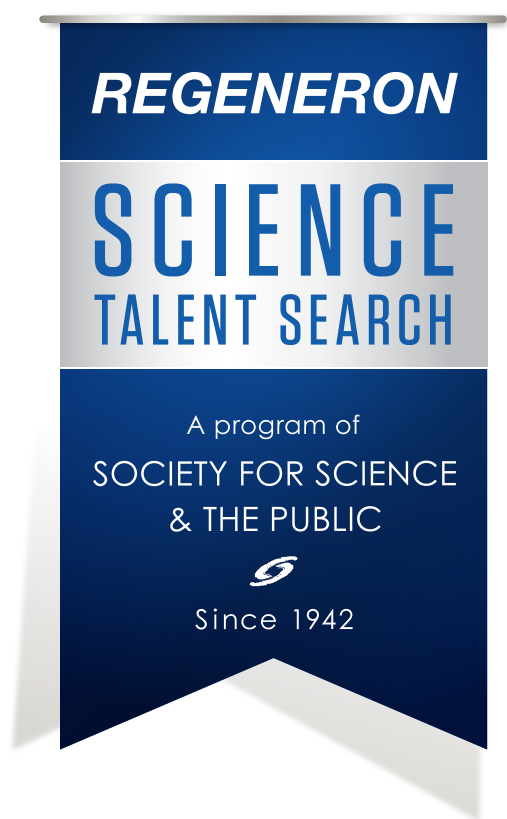### TALENT SEARCH

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2018 SCHOLARS

2018 SCHOLARS

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ALABAMA

Indian Springs

Indian Springs School
Jiao, Ken, 17
Retain CHD7, an Epigenetic Regulator, in the Nucleus to Combat Breast Cancer Metastasis

Madison

James Clemens High School
Guo, Sophie, 17
Ultra-Sensitive and Rapid *E. Coli* Bacteria Detection Using Nanoplasmonic Biosensor Chips and Antibody-Antigen Binding

Vestavia Hills

Vestavia Hills High School
Zhang, William, 18
Improved Bounds on the Extremal Function of Hypergraphs

ARIZONA

Chandler

Hamilton High School
Konan, Sachin Ganesh, 17
A Low-Cost, Clutter-Cancelling Life Detection System for First Response After Natural Disasters

Peoria

Gintz Homeschool
Gintz, Michael, 18
Classifying Graph Lie Algebras

Scottsdale

BASIS Scottsdale
Mehta, Vilina, 17
Discovery of a MicroRNA-Targeted Approach to Overcoming Drug Resistance and Advancing Therapeutic Strategies for Glioblastoma Multiforme

Tucson

Galasso Homeschool
Galasso, Joseph, 17
Enabling Powerless, Efficient Superabsorbent Polymer Desalination via Molecular Enhancement of Ion Rejection

CALIFORNIA

Atherton

Menlo School
Tewari, Laikh, 18
Precisely Measuring Changes in Seismic Wave Velocity Using Cross-Correlation of Characteristic Earthquakes in Parkfield, CA

Cupertino

Cupertino High School
Tandon, Utkarsh, 18
Diffusion Tensor Imaging Enabled Tractographical Modeling of Early-Onset Schizophrenia Through a Machine Learning Predictor of Novel Cingulate-Orbitofrontal Fiber Abnormalities

Dublin

Dublin High School
Wang, James Liyuan, 18
Using Deep Convolutional Neural Networks to Optimize Pulmonary Nodule Classification and Localization in Radiograph Imaging for Early Lung Cancer Detection

Fremont

American High School
Zhao, Angela, 17
Identification of Appropriate Housekeeping Genes is Critical for Paving the Way for Success of Stroke Research with Optogenetics

Fullerton

Troy High School
Xu, Sherry, 17
Intraspecific Genome Size Variation in *Draba verna*

Irvine

Northwood High School
Parthasarathy, Nitya, 17
Evaluation of Gender Bias in Social Media Using Artificial Intelligence

University High School
Wu, Michael, 17
Harnessing Upconversion in a Microreactor for On-Demand, Solar-Driven Pharmaceutical Synthesis within Syrian Refugee Camps

La Jolla

The Bishop's School
Scheibler, William Robert, 18
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Livermore

Granada High School
Yang, Erika, 17
Developing a Novel Flexible MoS_2 Biosensor with Patterned 25 nm Period Nano-Line Channel to Detect Lower-Concentrated Biomolecules

Moraga

Campolindo High School
Tremsin, Vasily Antonovich, 18
SoilMoist: Real-Time Three-Dimensional Imaging of Soil Moisture Distribution for Intelligent Irrigation

Mountain View

St. Francis High School
Ambatipudi, Mythri, 17
Combating Neurovirulence of Zika and Flavivirus Epidemics Using *In Silico* Phylogenetic Analysis and RNAi Gene Silencing

Oak Park

Oak Park High School
Sun, Carol Kaile, 17
A Maximum Likelihood Approach for Non-invasive Cancer Diagnosis Using Methylation Profiling of Cell-free DNA from Blood

Palo Alto

Henry M. Gunn High School
Shi, Andrew, 17
Recursive Path-Summing Simulation of Quantum Computation

Palo Alto High School
Singhal, Mihir, 17
Generalizations of Hall-Littlewood Polynomials

Rocklin

Rocklin High School
Mysore, Maya, 17
Characterizing Chemoattractant-Specific Features of CDC42 Signaling Activity in Neutrophil-like Cells

San Diego

Canyon Crest Academy
Chen, Maggie Shin-Young, 18
Cell Membrane-Coated Nanodevice for Anti-Virulence Therapy Against Antibiotic Resistant Bacteria

Krishnamurthy, Nithya, 17
Hippocampal Theta Phase Precession and Ensemble Neuron Spiking Pattern Dependence on Place Fields – Implications for Optimal Encoding of Episodic Memory

Sun, Daniel D., 17
METBIND: An Artificial Intelligence Approach to Metalloprotein Metal Binding Site Prediction

Del Norte High School
Hong, Rose, 17
Modeling 3D Bioprinting: Short-Term and Long-Term Effects of Fluid Flow and Shear Stress Forces on Squamous Cell Carcinoma, Keratinocyte, and Fibroblast Suspensions Sheared in Polyethylene Glycol Solutions

Westview School
Yin, Andre A., 18
A Novel Approach to Increasing the Permeability of Desalination Membranes

San Jose

Archbishop Mitty High School
Veeramacheneni, Teja Sai, 17
A Novel 3D Wavelet-Based Co-Registration Algorithm with Improved Accuracy for Fusion of PET and MRI Brain Scans

Lynbrook High School
Huang, Jasper Jing-chieh, 17
Surface-Independent Acoustic Gait Analysis and Classification Using Support Vector Machines

Mehrotra, Rohan, 17
On-Demand Electrically Controlled Drug Release from Resorbable Nanocomposite Films

Patil, Advait, 17
A High-Throughput Multi-Omics Framework for Global Identification of Novel Molecular Interactions and Genome-Scale Modeling of Multicellular Ecosystems

Senthil, Vinay, 18
Three Dimensional Modeling and Real Time Data Analysis Algorithm for Bronchoscopy Enhancement

Wei, Melissa Lily, 17
eMap: A Web-Application for Automated Mapping of Electron Transfer Pathways in Proteins

Zhu, Bill, 17
Studying Quasar Absorber Host Galaxy Properties Using Image Stacking Technique with Machine Learning Algorithm on Sloan Digital Sky Survey Telescopic Imaging Data

Notre Dame High School
Jackson, Holly, 17
Topological Optimization of a Cuboct Truss Structure Using a Genetic Algorithm

The Harker School
Dunphy, Amy, 17
Preventing Urushiol (Poison Oak)-Induced Dermatitis by Deactivating the Allergen

Jin, Amy, 18
Deep Learning-Based Automated Tool Detection and Operative Skill Assessment in Surgical Videos

Lin, Jimmy, 17
Early Prediction of Invasive Breast Cancer: Deep Learning Detection of Morphological and Genomic Alterations for Automated Risk Assessment

Movva, Rajiv, 18
SNPpet: Computational Dissection of the Noncoding Genome Reveals Regulatory Sequence Patterns and Disease-Causing Single Nucleotide Polymorphisms

Xiao, Eleanor, 17
Using Metabolomics to Discover Biomarkers for Preterm Birth

Xie, Justin Long, 17
A New Light: Type Ia Supernovae Mechanism Identification Through Spectral Analysis of Dwarf Spheroidal Galaxies and Comparison to Theoretical Models

San Ramon   **Dougherty Valley High School**
Agarwal, Ayush, 17
Induction and Restriction Maps on Differential Posets and Critical Groups of Group Representations

Yao, Timothy, 17
Design and Optimization of a High-Performance Metamaterial Infrared Micro-Bolometer for Thermal Imaging and Night-Vision Applications

Saratoga   **Saratoga High School**
Zheng, Andrew, 17
Deep Learning for Radio Galaxy Classification

COLORADO

Boulder   **Fairview High School**
Fridberg, Kyle Oskar, 17
Discovery and Characterization of a Layered Fe(III)/Mn(III) Sulfate Compound: Precursor for New Lithium-ion Battery Cathodes

Fort Collins   **Fossil Ridge High School**
Chandra, Jay, 17
Carbon Coatings on a Copper Antimonide Anode for Enhanced Performance and Lifetime in Rechargeable Metal-ion Batteries

Greenwood Village   **Cherry Creek High School**
Prabhakaran, Abilash, 17
Selective Transfection Using DiBAC4(3)

Singh, Isani, 18
Investigating the Developmental Requirements of Sex Chromosome Genes Affected in Turner Syndrome

CONNECTICUT

Canton   **Canton High School**
Mesa, Gabriel, 18
Stimuped: Self-Sustaining Piezoelectric Insole for Treatment of Diabetic Neuropathy

Greenwich   **Greenwich High School**
Minichetti, Dante Grace, 17
Honeybee Melittin Apitherapy for Targeted Cancer Cell Suppression and Decimation

Ramachandran, Amit, 17
Simple Gold Nanoparticle-based Colorimetric Detection of *Escherichia coli* in a Tap Water Matrix via Microfluidic Chip Assay

Sundaram, Shobhita, 17
Detection of Premalignant Pancreatic Cancer via Computational Analysis of Serum Proteomic Profiles

Woo, Michelle, 17
Open-Wound Administration of Coagulant and Antibacterial Therapeutics via $CaCO_3$ Microparticle Self-Propulsion

New Haven	**Hopkins School**	

Darrow, David, 17
A Novel, Near-Optimal Spectral Method for Simulating Fluids in a Cylinder

Old Saybrook — **Old Saybrook High School**
Nucci, Jonah, 18
The BDNF/TrkB Pathway and its Role in Ovarian Cancer Metastasis

Waterford — **Waterford High School**
Wang, Sophie, 17
Development of an Effective Novel Copepod-Based Mosquito Ovitrap

Watertown — **The Taft School**
Yi, Joo Sung, 18
Forecasting the Detectability of Known Radial Velocity Planets with the Upcoming CHEOPS Mission

DELAWARE

Wilmington — **Charter School of Wilmington**
Xie, YuQing, 18
Modeling and Experiments of Electromagnetic Braking

FLORIDA

Fort Pierce — **Lincoln Park Academy**
Shareef, Haniya, 17
Molecular Characterization and Enhanced Efficacy in the Development of a Novel Host-Specific Bioherbicide Candidate for *Cyperus rotundus*

Gainesville — **Buchholz High School**
Balachandar, Sidhika, 18
Picoscale Mechanics of Atomically Engineered Materials

Miami — **Miami Palmetto Senior High School**
Fein, Michael, 17
Single-Cell and Single-Cell-Type Resolution Analysis of X Chromosome Inactivation and Imprinting in Human Brain

Orlando — **Timber Creek High School**
Wu, Daniel Jeffrey, 17
Energy Oversupply to Tissues: A Mechanism Potentially Underlying Multiple Cancer Risk Factors

Oviedo — **Oviedo High School**
Patel, Sapna Karina, 17
Kemotions – Keys to Emotional Cues

GEORGIA

Cumming — **South Forsyth High School**
Karanam, Arjun, 17
Using Oil Compounds and Machine Learning Algorithms to Develop an Effective and Affordable Solution to Mitigate Radon Gas

HAWAII

Honolulu — **Iolani School**
Huang, Davey H., 18
A Morphokinetic and Machine Learning Model for Aneuploidy Screening of Human Preimplantation Embryos

IDAHO
Twin Falls

Twin Falls High School
Hansen, Kylie Yui, 18
An Analysis of Gravitational Microlensing Events Lacking a Baseline Magnitude

ILLINOIS
Aurora

Illinois Mathematics and Science Academy
Mu, Melissa, 18
Investigation of Bonding Modes and Strengths of Noncovalent Interactions in the Halocyclization Reaction Conditions

INDIANA
Indianapolis

Park Tudor School
Shen, Michelle, 18
Modeling Population Dynamics in Changing Environments

West Lafayette

West Lafayette Junior-Senior High School
Jing, Bowen, 18
Targeted Screen of Genes Involved in *Drosophila* Neuromuscular Junction Development

KANSAS
Manhattan

Manhattan High School
Jung, Luann, 16
A Machine Learning Method for Selection of Genetic Variants and Prediction of Type 2 Diabetes Mellitus Using Next-Generation Sequencing Data

Overland Park

Shawnee Mission West High School
Smith, Erin, 18
A Novel Diagnostic and Monitoring Tool for Parkinson's Disease: The Use of Digital Action Unit Biomarkers Generated by Spontaneous and Posed Facial Expressions

MARYLAND
Baltimore

Baltimore Polytechnic Institute
Brody, Rebecca, 17
The Effect of Low Oxygen on Induced Pluripotent Stem Cell-Derived
Endothelial Cells

Wayner, Claire Calvert, 17
Effects of Inhibitory Bacterial Biofilms on *Escherichia coli* Contamination Levels in Engineered Infiltration Systems

Bethesda

Walt Whitman High School
Murphy, Ayzhan Juliet, 18
Next Generation Liquid Biopsies: Dynamically Assessing Tumor and Host in Oncology
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Ellicott City

Centennial High School
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Cross-Cancer Prediction: A Novel Machine Learning Approach to Discover Molecular Targets for Development of Treatments for Multiple Cancers

Murali, Chythanya, 17
CAR-NK-Cell Therapy: Raising the Tail of the Survival Curve

Nalubola, Swadhin Rishi, 16
A Novel Deformability-Based Flow Cytometry Method for Mechanical Phenotyping of Animal Erythrocytes

Poolesville

Poolesville High School
Vangara, Sreya, 18
Novel Detection Method of Subatomic-Scale Motion through Plasmonic Resonators

Potomac

Winston Churchill High School
Chen, Bethany, 17
Generation of a Therapeutic Monoclonal Antibody for Acute Myeloid Leukemia by Employing the U937 Cell Line as a Surrogate Antigen

Silver Spring

Montgomery Blair High School
Gao, Sarah, 17
Developing Phage Endolysins as Novel Therapeutics for Multi-Drug Resistant Bacterial Infections

Jiang, Kevin, 17
Role of MYPT2 in Modulating STAT3 Activity in Breast and Ovarian Cancer Cells

Komo, Andrew, 17
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European Option Pricing with Stochastic Volatility and Jumps: Comparison of Monte Carlo and Fast Fourier Transform Methods

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Siddique, Arman, 17
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Accelerating Molecular Dynamics: Deep Learning Accurately Predicts Hidden Markov Models for Protein-DNA Molecular Dynamics

Wu, David Xing, 17
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Genotype Influences Day-to-Day Variability in Sleep

Zhang, Alice Anran, 17
A Dynamic Programming Algorithm for Minimizing Delays in Traffic Intersections

Zhang, Ariel, 17
Development of Exceedingly Small Magnetic Iron Oxide Nanoparticles as a Novel Contrast Agent for Improved T1−Weighted Magnetic Resonance Imaging

MASSACHUSETTS

Amherst

Amherst Regional High School
Fang, Sophia, 18
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Andover

Phillips Academy
Ren, Michael, 18
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Wang, Andrew, 17
An Atmospheric Modeling Tool for Astronomical Site Characterization

Boston

The Newman School
Pentland, Dylan, 18
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Cambridge

Buckingham Browne and Nichols
Tang, Michelle, 18
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Cambridge Rindge & Latin School
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Searching for Topological Bubbles for Phononic Honeycomb Lattice

Concord

Concord-Carlisle Regional High School
Cheng, Chao, 18
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Holden

Wachusett Regional High School
Mizerak, Evan, 18
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Lexington

Lexington High School
Bhupatiraju, Vivek, 16
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Das, Sanjna, 17
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Golowich, Louis, 17
New Efficient Deterministic Parallel Random Number Generators with Improved Theoretical Properties

Newton Centre

Newton South High School
Cole, Hannah, 18
SR-18662 Targets Krüppel-Like Factor 5 (KLF5) and Tumor Growth in Colorectal Cancer

Sheffield

Berkshire School
Millard, Charles Edward Francis, II, 18
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Wayland

Wayland High School
Zhong, Alexander H., 17
Differential and Functional Modulation of N-Glycans on CD39L3 Protein, a Purinergic Signaling Enzyme Therapeutically Important for Diabetes

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Ridgeland

St. Andrew's Episcopal School
Hutchison, Charley, 17
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MISSOURI

Camdenton

Camdenton High School
Kline, Olivia, 18
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Chesterfield

Marquette High School
Zhang, Jerry, 17
A Geant4 Monte Carlo Simulation of a Quantum Entanglement Experiment of the Decay of Spin-Singlet State Positronium: Computer Replication and Multiple Scattering Mitigation

Fenton

Rockwood Summit High School
Peng, Alan, 17
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Saint Louis

Ladue Horton Watkins High School
Wang, Julia M., 18
A Novel Technique for Monitoring Blood Pulse Shape with Packaged Whispering-Gallery-Mode Optical Micro-Toroids

NEVADA

Las Vegas

Edward Clark High School
Wang, Andrew, 17
CVD Processing of Nano-Crystalline Diamond Stents via Controlled Ion Collisions: A Novel Treatment to Coronary Artery Disease

NEW HAMPSHIRE

Exeter

Phillips Exeter Academy
Vale, Vinjai, 17
A New Paradigm for Computer Vision Based on Compositional Representation

NEW JERSEY

Allendale

Northern Highlands Regional High School
Huang, Grace, 17
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Hackensack

Academy for Business & Finance
Impalli, Isabella Lin, 17
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Academy for Medical Science Technology
Cho, Daniel Hyun, 17
The Effect of miR-146a on Cell Metastasis and Invasion in Hepatocellular Carcinoma

Dai, Katherine, 17
Targeting PINK1: Exploiting Mitochondria-Dependent Apoptotic and Metabolic Pathways in NSCLC

Lee, Gene K., 18
Squeezing the Envelope, a Method to Target Metastases

Parsley, Julia Victoria, 17
Alpha Synuclein and Cellular Death in Lewy Body Dementia

Stier, Kenneth, 18
Blockade of gC1qR at the C1q Binding Site Inhibits Growth in a Biphasic Mesothelioma Cell Line Expressing gC1qR but not C1q.

Vasa, Devarshi, 18
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Whang, Clairisse Eunhae, 17
Hidden in Plain Sight: Lipid Droplets, a New Culprit in Alzheimer's Pathology

Academy for the Advancement of Science and Technology
Lohe, Nikhil, 18
What Doesn't Kill Yeast Makes Yeast Stronger: Creating a "Super" Bioremediator with Sub-Lethal Pretreatment

Moiseyev, Nicole, 18
The Effects of the Orphan Drug Act on Rare Disease Research and Drug Development: Evidence from a Regression Discontinuity Design

Shefter, Deena, 17
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Lawrenceville   **Lawrenceville School**
Gopal, Nikhil, 17
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Lin, Bradford, 17
Evaluating the Effects of Atmospheric Aerosol Loading on Surface Radiation and Cloud Microphysical Properties Over the Hawaiian Islands

Tanga, Sreyans R., 18
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Lincroft   **High Technology High School**
Wu, Yihan Wendy, 18
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Livingston   **Livingston High School**
Li, Carrie, 17
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Millburn   **Millburn High School**
Engel, Miriam, 18
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Juo, Natalie, 18
Lateral Force Transfer and Stress Proteins in the Quadriceps of Aging Rats

Warren   **Watchung Hills Regional High School**
Dai, Vincent, 17
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NEW MEXICO
Albuquerque   **La Cueva High School**
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NEW YORK
Ardsley   **Ardsley High School**
Venkatadri, Tara Kamala, 17
Exploring Lunar Impact Basin Porosity Through a Weighted Least-Squares Fit Model

Zhong, Margaret, 17
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Armonk

Byram Hills High School

Aberman, Alexis, 18
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Brocato, Alexandra, 17
Illuminating Non-Neuromuscular Phenotypes and Their Temporal Trajectory in Spinal Muscular Atrophy (SMA) Using Electronic Health Records

Li, Stella, 18
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Ma, Jeremy, 17
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Roslin, Kylie Rina, 17
Exploring the Role of Herpes Simplex Virus-1 Antibodies in Anti-N-Methyl-D-Aspartate Receptor Encephalitis

Bellmore

John F. Kennedy High School

Klein, Matthew, 17
Galaxy Cluster Assembly and Ignition of Active Galactic Nuclei

Levy, Cameron Reuven, 17
An Analysis of the Interactions Among the Histone Deacytylase Sir2, TOR Signaling, and the Heat Shock Response Instigator Heat Shock Factor 1

Bethpage

Bethpage High School

Shah, Smiti K., 17
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Bronx

Bronx High School of Science

Asch, Alexa, 17
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Baron, Philippe Benjamin, 17
Redefining Protein Stability with the First Adequate Model for Secondary Structure Calculations

Carter, David Owen, 18
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Chen, Tainon, 17
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Cheung, Jennifer, 17
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Edwards, Quincy, 17
Fuzzy Control with Fuzzy Inputs for Smart DC Microgrid Energy Management

Jahan, Nusrath, 17
The Underlying Mechanism of Diffuse Intrinsic Pontine Glioma in Relation to Polycomb Repressive Complex 2 Activity and Histone H3K27M

Kalva, Swara Reddy, 18
Gibson Deletion: A Novel Application of Isothermal *in vitro* Recombination

Massey, Mateo, 17
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Mitsuya, Ryoha, 17
A Novel Methodology in Measuring the Excitability of M1 Pyramidal Neurons and Modeling the Computational Capacity of Dendrites

Porlein, Maximilian, 17
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Qi, Justin Kaiyuan, 17
Out of the Frying Pan, Into the Fire: Secondary Uranium Uptake Problems in ESR Dating Eastern Europe's Oldest Hearths at Medzhibozh, Ukraine

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A New Computational Model for the Detection of Microcephaly: A Much Needed Method in the Age of Zika

Sue, Rachel Ashley, 18
Comparing Replication Stress Responses in Cells Expressing Different Oncogenes

Zarubin, Vera Alexandra, 17
A Novel Methodology to Build Organic Multifunctional Materials via Magnetic Alignment

Horace Mann School
Feiner, Ella, 18
Exploring Posterior Growth in *D. rerio* Using a Live Cell Cycle Biosensor

Commack

Commack High School
Lee, Daniel H., 17
Sensor-Network-based Deep Learning Model for Wind Field Estimation

Singh, Anoop, 17
A Multilinear Approach to Forecasting the El Niño Southern Oscillation

Dix Hills

Half Hollow Hills High School East
Patil, Aditi, 17
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Half Hollow Hills High School West
Spencer, Gilbert, 18
A Novel Method to Deconvolute the Ice Core Record of Carbon Dioxide

Dobbs Ferry

Dobbs Ferry High School
Cadenhead, Rebecca, 17
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East Setauket

Ward Melville High School
Huang, Emily, 18
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Lu, Michael Kaiyuan, 17
MicroRNAs Contribute to Angiotensin II-Mediated Electrical Remodeling of the Heart

Flushing   **Townsend Harris High School**
Sadik, Noah, 17
Saliva-Based Assay Development for Non-invasive Brain Tumor Diagnostics

Glen Head   **North Shore High School**
O'Brien, Audrey, 18
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Concentration in Kidney Function: A Novel Approach to Predicting Postoperative Kidney Function

Great Neck   **John L. Miller Great Neck North High School**
Dilamani, Natasha, 17
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Shteyman, Amy, 18
The Language of Facial Expressions: A Neuroimaging Study of How a Smile is Generated and
Perceived by Another Person

Xu, Megan, 17
Taphonomy of Neoproterozoic Organic-Walled Microfossils: The Relationship Between Total
Organic Carbon and Presentation Quality

North Shore Hebrew Academy High School
Soifer, Scott Andrew, 17
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William A. Shine Great Neck South High School
Kim, Daniel H., 18
Quantifying the Affinity of Mutated scFv's in Chimeric Antigen Receptor T Cells for GD2-Targeted
Treatment of Neuroblastoma

Kuang, Eric, 17
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Wang, Cindy, 17
Observation of the Chiral Magnetic Effect in the Quark-Gluon Plasma Produced in Au+Au
Collisions at the Relativistic Heavy Ion Collider

Xing, Michelle, 17
Direct Functionalization of Algal Nanocellulose to Enhance Biosorption for Lead(II) Remediation

Harrison   **Harrison High School**
Kim, Chanha, 18
The Role of GAMMA DELTA T Cells in Human Intestinal Transplantation

Siegel, Brian Michael, 17
Increasing Absorbance and Coupling of Visible Light Using Hyperbolic Metamaterials on
Polystyrene Spheres

Hastings-on-Hudson   **Hastings High School**
Scotch, Hannah Tess, 17
Secondary Transcription Factors of glb-34 in *C. elegans* Chemosensory BAG Neurons

Hewlett   **George W. Hewlett High School**
Ng, Justin, 18
A Haloacid-Dehalogenase-Like Hydrolase Regulates Cell Elongation in Prothallial Cells from
Gametophytes of *Ceratopteris richardii* During Cold Stress

Xu, Winnie, 17
The Paradox of Vulnerability: An Examination of Vulnerability Expression on Adolescent Stress and Self-Esteem

Jericho

Jericho Senior High School
Bhuiyan, Mutahara Nurit, 17
Sustainability in Water Treatment: Heavy Metal Remediation via Nitro-Oxidized Carboxycellulose Nanofibers

Fang, Andrew, 17
Artemisinin as a Potential Parkinson's Disease Treatment via Alleviation of α-Synuclein Mediated Neuronal Damage and Inflammation

Gurnani, Ishan, 17
A Novel Piezoelectric Sensor for Continuous Monitoring of Sodium Concentrations in Sweat

Huo, Marc, 17
Circumventing Bottlenecks in RNAi-Based Therapeutics: pH Sensitive Transferrin Bound siACSL5-Loaded Nanoparticles

Lo, Chiu Fan Bowen, 18
Near-Field Nanoscopy Simulation by Incorporating Harmonic Demodulation and Cone-Shaped Probing Tip

Lo, Dennis, 17
A Novel Computerized Phenotype-Oriented Algorithm for Asthma Diagnostics

Madankumar, Swati, 17
Magnesium Deficiency Promotes Survival and Motility of Colon Cancer Cells

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Profiling the Transfusion Dependent Immunology of T-cells in Sickle Cell Disease Alloimmunization

Wu, Yunyan, 17
Ciliogenesis Facilitated by Ciliopathy Genes Wdpcp and Rpgrip1l: A Requirement for Hair Follicle Development

Xie, Brandon, 18
Dual Function Materials for CO_2 Capture and Synthetic Fuel Production

Zhang, Kendra, 17
Paper-Based Microbial Fuel Cells for Self-Powered Sustainable Disease Monitoring

Kings Park

Kings Park High School
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Hunter College High School
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Pelham

Pelham Memorial High School
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Pittsford

Pittsford Sutherland High School
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Plainview

Plainview-Old Bethpage John F. Kennedy High School
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Paul D. Schreiber High School
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Roslyn Heights

Roslyn High School
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Rye Brook

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Scarsdale   **Edgemont High School**
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South Huntington   **St. Anthony's High School**
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Staten Island   **Staten Island Technical High School**
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Syosset   **Syosset High School**
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Tarrytown   **Hackley School**
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Upper Nyack   **Nyack High School**
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Yorktown Heights   **Yorktown High School**
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Chapel Hill   **East Chapel Hill High School**
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Durham   **North Carolina School of Science and Mathematics**
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Columbus   <u>**The Wellington School**</u>
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Solon   <u>**Solon High School**</u>
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Portland   <u>**Jesuit High School**</u>
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<u>**Oregon Episcopal School**</u>
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<u>**Sunset High School**</u>
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Parkland High School
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Berwyn

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Glen Mills

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McMurray

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Warrington

Central Bucks High School South
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Columbia

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Academic Magnet High School
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Brookings

Brookings High School
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Nashville

Martin Luther King Jr. Magnet High School
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Allen

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Bellaire

Bellaire High School
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Broad Run High School
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Potomac School
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Mill Creek

Henry M. Jackson High School
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Redmond

Redmond High School
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Tesla STEM High School
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Brookfield

Brookfield Central High School
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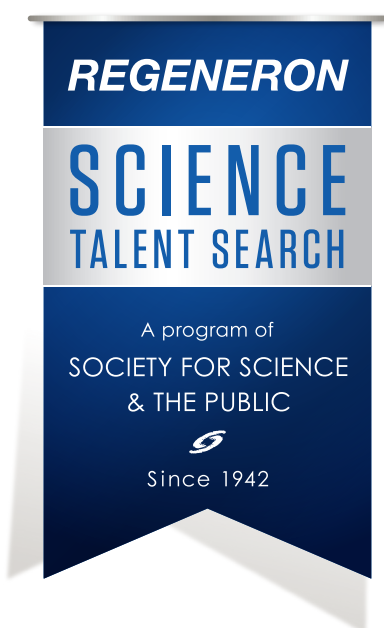https://medium.com/@society4science
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