

REGENERON

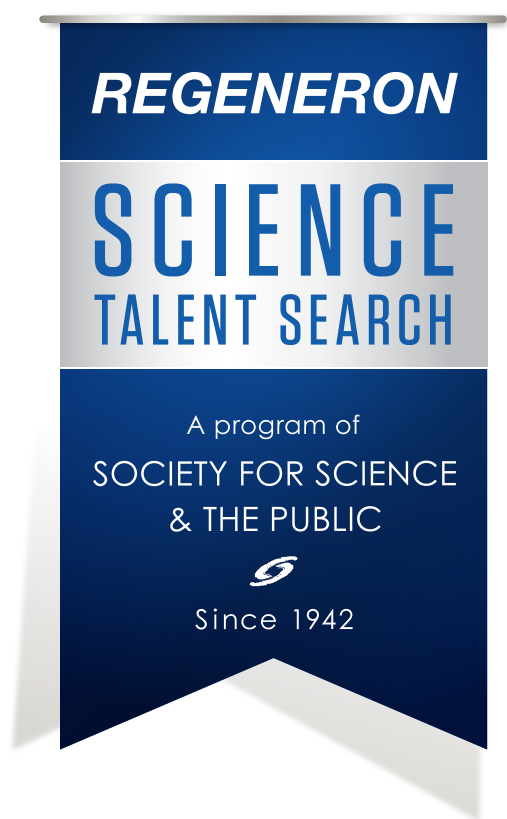
**SCIENCE
TALENT SEARCH**

A program of
SOCIETY FOR SCIENCE
& THE PUBLIC



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**REGENERON SCIENCE
TALENT SEARCH
2019 SCHOLARS**



2019 SCHOLARS

The Regeneron Science Talent Search (Regeneron STS), a program of Society for Science & the Public, is the nation's most prestigious science and math competition for high school seniors. Alumni of STS have made extraordinary contributions to science and hold more than 100 of the world's most distinguished science and math honors, including the Nobel Prize and the National Medal of Science. Each year, 300 Regeneron STS scholars and their schools are recognized. From that select pool of scholars, 40 student finalists are invited to Washington, D.C. in March to participate in final judging, display their work to the public, meet with notable scientists and compete for awards, including the top award of \$250,000.

ALABAMA

Auburn

Auburn High School

Lange, Noel, 18

Development of an Innovative Strategy to Protect the Aquatic Environment from Household Plastic Microfibers

ARIZONA

Chandler

Hamilton High School

Dani, Samihan, 17

Enabling Ammonia as a Nitrogen Source for Sustainable Microalgal Cultivation at Alkaline pH Levels

Long, Mindy, 18

A Smartphone-Based, Point-of-Care Iron Sensor Utilizing Colorimetric Techniques

Scottsdale

BASIS Scottsdale

Narayan, Saaketh, 18

Impact of Crystal Orientation and Dopant Concentration on Native Silicon Oxides

ARKANSAS

Hot Springs

Arkansas School for Mathematics, Science & the Arts

Jia, Mary, 17

Comprehensive Analysis of the Agronomic and Molecular Genes of Katy Rice and Katy Mutagenesis Mutants Through Next-Generation Whole Genome Mapping and Sequencing

CALIFORNIA

Atherton

Menlo School

Kim, John, 17

Speech Emotion Recognition Using Temporal Information and Deep Learning

Menlo-Atherton High School

Quinlan, Anna, 17

A Low Cost, Closed Loop Insulin Pump for the Better Management of Types 1 and 2 Diabetes Mellitus

Cupertino

Cupertino High School

Varghese, Leah, 17

Methamphetamine and HIV-Tat Induce Endothelial Damage Through Oxidative Stress: A Novel Cause of Pulmonary Arterial Hypertension

Homestead High School

Mishra, Reet, 18

Analyzing Oxford Nanopore DNA Sequencing Data to Locate Alanine Substitution Mutants of a Polyketide Synthase

Monta Vista High School

Kamarshi, Vivek, 18

Cellular Pathways for Increasing Cell Fusion and Decreasing Replication of Varicella Zoster Virus

Dublin

Dublin High School

Pajjuri, Mallika, 17

Designing a Thermostable, Slow Releasing Oral Vaccine for Mass Immunization via Microfluidic-Synthesized Hydrogel Beads

Fremont

Mission San Jose High School

Ko, Jonathan, 18

The Impostor Phenomenon and Performance

Hemet	<p><u>Western Center Academy</u> <i>Horton, Krystal, 17</i> Using DNA Barcodes to Evaluate Ecosystem Health in SWRCMS Reserve</p>
Irvine	<p><u>University High School</u> <i>Jiang, Lan, 18</i> Defining a New Diagnostic Paradigm in Primary Central Nervous System Hypersomnias Through Statistical Machine Learning</p> <p><i>Liu, Patrick, 18</i> iCORDISX: Smartphone-Based Personalized Cardiac Monitoring Systems Using Statistical Analyses and Bluetooth Low Energy</p> <p><i>Zhong, Amy, 17</i> Plastics Destroying Your DNA: an Inquiry into the R-Loop Inducing Behaviors of Bisphenol A and its Implications</p> <p><i>Zou, Joshua, 17</i> Project PLANET-NOONS: The PipeLine for Analyzing New Exoplanet Transits Using Neural Networks to Operate and Observe uNiversal Surveys</p> <p><u>Woodbridge High School</u> <i>Kopecky, Morgan, 17</i> Optimizing Long-term Gene Expression Using Chromatin Insulators in Stably Integrated Multi-Gene Constructs</p>
La Crescenta	<p><u>Crescenta Valley High School</u> <i>Co Ting Keh, Lyron, 17</i> HICCUP: A Novel Hierarchical Machine Learning Model for Cancer of Unknown Primary Classification</p>
Los Altos	<p><u>Los Altos High School</u> <i>Shi, Yongxin, 17</i> In Sickness and in Health: Quantitative Analyses of the Structural Changes in Femurs and Spinal Vertebrae as a Consequence of Osteoporosis</p>
Los Angeles	<p><u>Yeshiva University High School of Los Angeles</u> <i>Willner, Ari, 17</i> Scalable and Reconfigurable Optical Tap-Delay-Line for Multichannel Equalization and Correlation of 20-Gbaud QPSK Signals Using Nonlinear Wave Mixing and a Microresonator Kerr Frequency Comb</p>
Mission Viejo	<p><u>Trabuco Hills High School</u> <i>Desai, Rishi, 18</i> BioFabric Visualization of Network Alignments</p>
Mountain View	<p><u>St. Francis High School</u> <i>Karthik, Ananya, 17</i> Ultrasonic Drug Uncaging from Polymeric Perfluoropentane Nanoparticles</p>
Newport Beach	<p><u>Sage Hill School</u> <i>Sheen, Grant, 17</i> Wireless Brain Wave Classification for Alzheimer's Patients via Efficient Neural Network Computation</p>
North Hollywood	<p><u>North Hollywood High School</u> <i>Michaels, Tai, 17</i> Effects of Short Fire Return Intervals on Plant Diversity, Invasion, and Fire Risk in Chaparral Ecosystems</p>

Palo Alto

Palo Alto High School

Xie, Anthony, 17

Classifying Sensory Neurons Using Single-Cell RNA Sequencing

San Diego

Canyon Crest Academy

Huang, Allen, 18

Targeting eIF4A3 by RNA Interference: A New Strategy for Breast Cancer Therapy

Roy, Ronak, 17

Smartphone-Controlled Portable Phoropter Powered by Variable Focal Length Liquid Lens

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Del Norte High School

Krishnamoorthy, Vinod, 17

Mathematical Analysis and Experimental Demonstration of a Stationary Optical Spectrometer with Improved Resolution

San Jose

The Harker School

Alag, Ayush, 17

Computational DNA Methylation Analysis of Food Allergy Yields Novel 13-gene Signature to Diagnose Clinical Reactivity

Jones, Cameron, 17

Automated Identification of Organic Molecular Structure and Relative Concentrations from Infrared Spectral Data Through the Use of Deep Convolutional Neural Networks

Maniar, Natasha, 17

MapAF: Deep Learning to Improve Therapy of Complex Human Heart Rhythm Abnormalities

Sayana, Ruhi, 17

Precision Care for Leukemia: Discovery of Novel Therapeutics for High-Risk ALL via Epigenetic and Computational Transcriptome Profiling

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Interpretable Deep Learning Approaches to Uncover the Sequence Determinants of Cell-Type-Specific Transcription Factor Binding

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Wang, Richard, 17

Identify Novel Natural Products with Inhibitory Effects on HOXA9-induced Acute Leukemia Through *in vitro* Functional Assays

Leland High School

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Lin, Jerry, 17

Navigation Apps Induce Cut-Through Traffic Congestion: An Analysis of Real-Life App Routing Suggestions

Lynbrook High School

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Huang, Charles, 17

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Connectedness of the Moduli Space of Genus 1 Planar Tropical Curves

San Mateo

The Nueva School

Cheng, Ben 16

Augmenting Expression of Gene Editing CRISPR-SaCas9 in Human Liver Cells Through Codon Optimization to Boost *in vivo* Therapeutic Application

Santa Barbara

San Marcos High School

Campagnari, Bianca, 18

How Many Micro-Mollusks Are There? A Case Study on Species Richness in Hawai'i

Yorba Linda

Yorba Linda High School

Song, Andrew, 18

PEDOT Aptamer-Based Biosensors for Detection of Thrombin

COLORADO

Monte Vista

Monte Vista High School

Rawinski, Alyssa, 17

Mealworms... A Potential Solution to the Global Plastic Problem

CONNECTICUT

Greenwich

Greenwich Academy

Laumas, Anisha, 18

The Role of microRNA-34 in Acute Megakaryoblastic Leukemia

Greenwich High School

Hawley, Bennett, 17

Biomimetic Degradation of Persistent Pollutants Using Common Wax Worm *I. sakaiensis* Bacteria

Wallingford

Choate Rosemary Hall

Koljaka, Sarah, 17

Role of Cellular Prion Protein and Laminin Receptor in Meningioma

Lee, Se Ri, 17

A Study on the Correlation Between the Structure and Desalination Efficiency of Reverse Osmosis Membranes Fabricated by Interfacial Polymerization

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Wilmington

Charter School of Wilmington

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Effects of Silicon Amendments on the Concentration and Adsorption Properties of Iron-Oxides in Rice Paddy Soils

Lu, Grant, 17

Structure, Magnetic Properties, and Thermal Stability of Chemically Prepared Nickel Carbide Nanoparticles

DISTRICT OF COLUMBIA

Washington

School Without Walls

Lossef, Sam, 17

Printenna: A 3D Printed Biquad Yagi Antenna for Transmission of Space Solar Power

FLORIDA

Boca Raton

Florida Atlantic University High School

Herbst, Hannah, 18

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Miami

Dr. Michael M. Krop High School

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Osprey

Pine View School

Zhu, Kevin, 17

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Plantation

American Heritage School

DiStefano, Nicholas, 18

Improving Wound Healing by Breaking Down Biofilm Formation and Reducing Nosocomial Infections

GEORGIA

Atlanta

Lakeside High School

Weiss, Zoe, 17

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College Park

Woodward Academy

Hallas, Sydney, 18

Using Laser Diagnostics to Determine the Behaviors of Reacting Jets Injected Perpendicularly into a Vitiated Cross-Flow

ILLINOIS

Aurora

Illinois Mathematics and Science Academy

Ren, Jimmy, 17

DNA Methylation in Autophagy-Associated Genes and Risk of Prostate Cancer

Naperville

Neuqua Valley High School

Porter, Imani, 17

The Influence of Bacteria on Alopecia-Afflicted Scalp Environments

INDIANA

Carmel

Carmel High School

Jou, Parker, 17

The Impact of Rotational Damping on the Collective Motion Exhibited by Systems of Self-Propelled Particles

IOWA

Fairfield

Maharishi School

Chhaliyil, Pranav, 18

An *in vivo* and *in vitro* Study on the Effect of Polyphenols in Sugars on the Dental Plaque Microbiota Using Next-Gen Sequencing

KANSAS

Overland Park

Blue Valley Northwest High School

Wang, William, 17

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KENTUCKY

Bowling Green

The Gatton Academy of Mathematics and Science in Kentucky

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Visio-Haptic Shape Matching: Using Salient Gaussian Features to Identify Object Shape

Lexington

duPont Manual Magnet High School

Chadha, Anjali 16

Development of a Fully Automated 3D Printed IoT Sensor for Arsenic Detection in Groundwater

Paul Laurence Dunbar High School

Seevers, Rachel, 17

The Virtual Winglet: A Novel Approach to Boundary Layer Manipulation and Wingtip Vortex Suppression

LOUISIANA

Baton Rouge

Baton Rouge Magnet High School

Zaman, Anu, 18

SHERLOCKv3: Duplexed Viral Diagnostic Using CRISPR-Cas13 and LASSO

Covington

St. Paul's School

Devier, Joshua, 17

Analysis of the Antimicrobial Efficacy of Usnic Acid and Lichen Extracts

MAINE

Bangor

Bangor High School

Robinson, Noah, 18

Investigating the Relationship Between Polling Building Type and Voting Results: A Study in Priming

Bethel

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MARYLAND

Baltimore

Baltimore Polytechnic Institute

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Detection of *Schistosoma mansoni* Derived DNA Through the Use of Multiplex PCR from Filtered Urine Samples

Gilman School

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Effectiveness of Neratinib in Inhibiting or Reversing Hepatic Stellate Cell Activation: Implications for Cirrhosis and Liver Cancer

Great Mills Great Mills High School

Lindholm, Adam, 18

Let's Put Our Heads Together: A Practical Examination of Agonistic Behavior in Pachycephalosaurid Ornithopods

Ijamsville

Urbana High School

Yu, Joshua, 17

Synthetic Virus-Like Particles: The Future of Targeted Drug Delivery

Marriottsville

Marriotts Ridge High School

Herath, Isuru, 17

Towards the Discovery of Antibiotics from Soil Actinomycetes Using a Resistance-Directed Screening Assay

Poolesville

Poolesville High School

Bian, Vincent, 18

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Chen, Peiqi, 18

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Winston Churchill High School

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Ma, Jessie, 17

Dangerous Bugs are Blowing in the Wind by Hand Dryers in Public Bathrooms

Rockville

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Han, Ivy, 18

A Novel, High-Throughput, Spectrometer-Based Functional Assay for *Drosophila* Nephrocytes

Shi, Tesia, 17

A Novel Method to Identify Common Pathways and Genes Through Meta-Analysis of Microarray Expression Data of Bipolar Disorder, Schizophrenia, and Major Depressive Disorder Reveals Two Common Affected Lmx1a and Cct8p1 Genes and one Common Affected TCA Pathway

Silver Spring

Montgomery Blair High School

Borton, Allison, 18

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Cai, Grace, 17

An Urgency Dependent Quorum Sensing Algorithm for N-Site Selection in Autonomous Swarms

Cui, Laura, 17

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Durvasula, Naveen, 17

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Qian, Kevin, 18

Heisenberg-Scaling Measurement Protocol for Analytic Functions with Quantum Sensor Networks

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Schäffer, Daniel, 17

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Zhu, Daniel, 17

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MASSACHUSETTS

Acton

Acton-Boxborough Regional High School

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Kasar, Atharva, 18

Analyzing the Effect of a Percussive Backbeat on Alpha, Beta, Theta, and Delta Binaural Beats

Andover

Phillips Academy

Chang, Justin, 18

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Hou, Kaiying, 18

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NExplore: Visualizing Recurring Structures in Dynamic Networks with Automated Pattern Extraction

Belmont

Belmont Hill School

Daley, Nicholas, 17

Diploid Chromatin Conformation Capture and Developmental Changes of 3D Genome Structure

Boston

The Winsor School

Su, Angela, 17

Highly-Efficient Capturing and Highly-Sensitive Whole-Slide Counting of Circulating Tumor Cells Using an Integrated Capillary Microchannel Device

Brookline

Brookline High School

Chow, Yuen Ting, 17

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Xu, Frank, 17

A Unique Metalloproteinase Complex: ADAM10-MMP14

Concord

Middlesex School

Dong, Zhengyang, 18

netDAE: Novel Feature Learning Method of Gene Expression Data Based on a Network-Enhanced Denoising Autoencoder

Lexington

Lexington High School

Chen, Robert, 18

Aleator: Random Beacon via Scalable Threshold Signatures

Yoo, Seo-Hyun, 18

Down-Regulation of Multi-Drug Resistance Proteins by microRNAs Enhances Chemotherapeutic Efficacy

Sharon

Sharon High School

Ravikumar, Akshaya, 17

Investigation of the Genetics of Smoking Behavior in the United Kingdom Biobank

Sheffield

Berkshire School

Lebenthal, Avalon, 18

Propionibacterium acnes biofilm: The Effect of Peptide 1018 on Bacterial Production

Tian, Daniel, 18

Robust Adversarial Perturbation on Deep Proposal-Based Models

Worcester

Massachusetts Academy of Math & Science

Srivastava, Shashvat, 17

AnonStake: An Anonymous Proof-of-Stake Cryptocurrency via Zero-Knowledge Proofs and Algorand

MICHIGAN

Ann Arbor

Ann Arbor Pioneer High School

Suresh, Arundhathy, 17

Holy Basil Protects Alveolar Epithelial Cells from Fatal Pneumonia

Beverly Hills

Detroit Country Day School

Yang, Madeleine, 17

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Bloomfield Hills

Cranbrook Kingswood School

Tan, Matthew, 18

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Port Huron

Port Huron Northern High School

Tumma, Neehal, 17

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MINNESOTA

Minnetonka

Minnetonka High School

Krishna, Parthiv, 17

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Rochester

Century High School

Mai, Michelle, 17

The Development of a High Sensitive Home Diagnosis Kit for Group A *Streptococcus* Bacteria (GAS)

Stillwater

Stillwater Senior High School

Jostes, Haley, 18

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MISSOURI

Ballwin

Parkway West High School

Tomala, Neil, 17

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Columbia

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Anand, Kevin, 17

Self-Reported Depressive Symptoms in Adolescence Increase the Risk for Obesity and High BP in Adulthood

Kansas City

The Barstow School

Case, Paul, 18

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Saint Louis

Ladue Horton Watkins High School

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Springfield

Central High School

Lu, Katie, 17

Silver Nanoparticles: Reducing Environmental Toxicity Through Shape Control

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Omaha

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NEW HAMPSHIRE

Durham

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Exeter

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Sathyamurthi, Tejas, 17

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NEW JERSEY

Chatham

Chatham High School

Andrews, Sophie, 17

Detection of Melanoma via Deep Learning

Colonia

Colonia High School

Fantell, Gianna, 18

Color-Mediated Thermoregulation and Latitudinal Distribution of North American Snakes: Biogeographical Considerations

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Speech Intelligibility Analysis of Sound-Modulated Laser Signal Countermeasures

Hackensack

Bergen County Academies

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Dihydrotanshinone: A Pan-Therapeutic Treatment for Chemoresistance in Cancer

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Vascular-Endothelial Response to IDH1 Mutant Fibrosarcoma Secretome and Metabolite: Implications on Cancer Microenvironment

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Quantitative Analysis of Mechanical Impact on Neurological Health Utilizing Cellular Models of Differentiated Neuroblastoma Cells

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Exploring the Therapeutic Potential of Albiflorin in Alzheimer's Disease

Holmdel

Holmdel High School

Ahteck, Amanda, 17

A Novel Low Cost Resistive Soft Crochet Stretch Sensor as Applied to a Wearable Bluetooth Keyboard Text Input Device – midiKEY

Jersey City

Dr. Ronald E. McNair Academic High School

Agrawal, Harshal, 17

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Livingston

Livingston High School

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Morristown

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Zhong, Kevin, 18

A Novel Mechanism by Which 4-Nonylphenol Accelerates Alzheimer's Pathogenesis and Induces Both Tau-Amyloid Mediated Toxicity and Neuroinflammation

West Windsor

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Ferguson, Samuel, 18

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NEW YORK

Albany

The Albany Academies

Huang, Zachary, 17

Automated Seizure Detection Tailored Towards Portable Patient Care Using a Novel, Computationally Efficient Method of Analysis

Ardsley

Ardsley High School

Rivera, Alexandra, 17

A Step in Understanding Glacial Flow: Exploring the Effects of Entrained Insoluble Debris on Mechanical Properties of Polycrystalline Ice

Armonk

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Bellmore

John F. Kennedy High School

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Bay Scallop and Eastern Oyster Survival Within *Crepidula fornicata* Shell Beds in the Peconic Bays, New York

Sussman, Whitney, 17

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Brentwood

Brentwood High School – Sonderling Center

Perez, Ahmad, 17

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Briarcliff Manor

Briarcliff High School

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Bronx

Bronx High School of Science

Aharonian, Leon, 18

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Chappaqua

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Kumar, Chirag, 17

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Singh, Aditi, 17

Descriptive and Normative Accounts of Color Localization Performance in Visual Short-Term Memory

Zhang, Anna, 17

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Commack	<p><u>Commack High School</u> <i>Muthukumar, Pragati, 18</i> Phylogenetic Analysis to Provide Insight on Trihelix Gene function in <i>Arabidopsis thaliana</i></p>
Cortlandt Manor	<p><u>Walter Panas High School</u> <i>Bhandarkar, Riti, 17</i> Phylogenetics and Diversification of <i>Pipreola riefferii</i>, an Andean Fruiteater</p>
Cross River	<p><u>John Jay High School</u> <i>Sherr, Heather, 17</i> The Correlation of Sodium Palmitate Acetate to Metabolic Memory via Reactive Oxygen Species in Hyperglycemic Neonatal Rat Ventricular Myocytes</p>
Croton-on-Hudson	<p><u>Croton-Harmon High School</u> <i>Stok, Melissa, 18</i> Printing the Path: Studying a Gelatin-Alginate Composite Hydrogel for Translation of 3D Bioprinting Research</p>
Dix Hills	<p><u>Half Hollow Hills High School East</u> <i>Bhansali, Rinni, 17</i> A Trust Model in Bootstrap Percolation</p> <p><i>Weltmann, Matthew, 17</i> Palbociclib Treated MDA-MB-231 Breast Cancer Cells Exhibit Increased Invasive Behavior in Zebrafish Xenograft Model</p>
East Setauket	<p><u>Ward Melville High School</u> <i>Ge, Kelsey, 17</i> Multidecadal Trends in Tropical Cyclone Behavior within North Atlantic Sub-Basins</p> <p><i>Peña-Lobel, Maya, 17</i> Changes in Gene Expression of Ion Regulatory Proteins in Developing Atlantic Silverside (<i>Menidia menidia</i>) Subjected to Ocean Acidification Conditions</p> <p><i>Specht, Megan, 18</i> Effect of Micronutrient Consumption in Association with p53 status on Colon Cancer Progression: A Prospective Study in Racial Health Disparity.</p> <p><i>Wang, Elizabeth, 18</i> A Novel Effect of Cannabidiol (CBD) on Microglial Activation in the Presence of Epileptic Activity</p>
Farmingville	<p><u>Sachem High School East</u> <i>Zhang, Vincent, 17</i> MRI Texture Analysis for Detection of Axillary Lymph Node Metastasis in Breast Cancer Patients</p>
Great Neck	<p><u>John L. Miller Great Neck North High School</u> <i>Geula, Aaron, 17</i> The Neuroscience of Two: Does Cross Brain Coherence Measured by fNIRS Imply a Transfer of Information Between Partners</p> <p><i>Goh, Michelle, 18</i> The Neuroscience of Artificial Intelligence: Comparison of Brain Activation During Text-Based Chatting with Human and Chatbot Partners</p> <p><i>Lu, Christopher, 17</i> Taming a Retrotransposon: Identification of a Domesticated gag Gene in Zebrafish</p>

Rothbaum, Joshua, 17

Development of a Linear Tubular Design for Electrostatic Mobility Filters: A Cost-Effective Approach to Ion Mobility Spectrometry

William A. Shine Great Neck South High School

Wang, Ethan, 17

Artemisinin and Mefloquine as a Novel Chemotherapeutic Combination Therapy Against Colorectal Cancer Through Signaling Network Alleviation and p-glycoprotein Inhibition

Hewlett

George W. Hewlett High School

Bogdanov, Samuel, 17

Elucidating the Molecular Mechanism of *Clostridium perfringens* Epsilon Toxin (ETX) Cytotoxicity and the Requirement for the Myelin and Lymphocyte Protein MAL

Grossman, Julia, 17

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Yue, Siyuan, 17

A Non-Ricardian Model to Estimate Impact of Public Investment on GDP by Sectors: How and for What Should Public Investment be Targeting

Irvington

Irvington High School

Dunefsky, Jacob, 17

WellPATH: A Mobile Application to Reduce Suicidal Ideation in Seniors

Horowitz, Annie, 18

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Jericho

Jericho Senior High School

Hu, Jiaxuan, 17

High Precision Doppler Detections of Nearby Earth-like Planets Assisted by a Double Scrambler

Pahlavan, Arianna, 17

Discretizing a Hybrid Cardiac Reconstruction: A Novel Simulation of Sustained Fibrillation

Shah, Dia, 16

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Shayani, Gabriella, 17

FTO: Elucidating Roles in Cardiomyocyte Viability, Contractility, and Transcript Regulation

Shekar, Shruthi, 17

MALAT1 & SOX: Understanding Progression of Cancer Metastasis Post Application of Negative Pressure Wound Therapy on Tumor Resected Wound Beds

Subramanian, Madhav, 18

ETM* is Indispensable to Endothelial Behaviour During Tumor Angiogenesis

Xu, David, 17

A Digital Interaction Glove: Small-Scale IMU-Based Motion-Tracking and Bimodal (Bending/Pressure) Piezoresistive Fabric Sensing

Zhang, Jiaqi, 18

A Cross Cultural Study on the Impact of Stress on Thinking Styles of Chinese and American High School Students

Kings Park	<p><u>Kings Park High School</u> <i>Cai, Merrick, 17</i> The Hilbert Series of the Irreducible Quotient of the Polynomial Representation of the Rational Cherednik Algebra of Type A_{n-1} in Characteristic p for $p n-1$</p>
Levittown	<p><u>Island Trees High School</u> <i>Wendt, David, 17</i> Modeling Negative Thermal Expansion in ScF_3</p>
Lincolndale	<p><u>Somers High School</u> <i>Joseph, Rachel, 18</i> Optimization of Thermal Hydrolysis for Increased Biogas Generation in Wastewater Treatment</p>
Lynbrook	<p><u>Lynbrook High School</u> <i>Condoleo, Juliana, 17</i> Investigating the Novel Role of the Activated Cdc-42-Associated Tyrosine Kinase (ACK1) in Learning and Memory Using a Dack Null Allele in <i>Drosophila melanogaster</i></p> <p><i>Hausknecht, Kaylie, 17</i> Disentangling Spatial Correlations in Inhomogeneous Materials with Shift-Invariant Artificial Neural Networks</p>
Manhasset	<p><u>Manhasset High School</u> <i>Lee, Richard, 17</i> Analytical Interpretations of Geophysical Fluid Mechanics in Coaxial Borehole Heat Exchangers and Respective Applications</p> <p><i>Tak, Kendrick, 18</i> Supplementation of Protein Phosphatases with $LiCl$ and CeO_2 in Reducing Amyotrophic Lateral Sclerosis Related Tauopathy</p>
New Hyde Park	<p><u>Herricks High School</u> <i>Maheshwari, Eish, 16</i> Design of a Red Blood Cell-Based Drug-Delivery Platform for Improving Curcumin Pharmacokinetics and Bioavailability via Reengineered Silica Nanoparticles</p>
New York	<p><u>Columbia Grammar & Preparatory School</u> <i>Yuan, Bi Tian, 17</i> Discovering Ultra-Short-Period Planets Using Deep Learning</p> <p><u>Stuyvesant High School</u> <i>Cai, Fiona, 17</i> eML: Improving the Efficiency of Clinical Trial Recruitment Using Electronic Health Record (EHR) Data and Machine Learning</p> <p><i>Eckert, Lucien, 18</i> Synchronizing a Simulated Display of Time with Reality to Affect Experienced Presence Within VR</p> <p><i>McGillis, Clare, 17</i> A Study of the Factors Impacting Street Tree Growth in New York City</p>
Northport	<p><u>Northport High School</u> <i>Sierra, Katie, 17</i> Effects of Multiple Stressors on Survivorship and Growth in Juvenile <i>Mytilus edulis</i></p>
Old Westbury	<p><u>The Wheatley School</u> <i>Shukla, Manan, 18</i> Creating Affordable and Objective Healthcare Solutions Using IoT and Cloud Technology</p>

Zhu, Brandon, 17

Efficient Zero-Knowledge Using Garbled Circuits Under the Plain Model

Ossining

Ossining High School

Montgomery, Emma, 18

Improved Base Editors and a Novel Sensor Assay Advance Gene Editing Technology

Sukumar, John, 17

Elucidating the Factors that Induce Hyperfocus in Adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD) Through the Use of a Novel Time-Constrained Stroop Task

Ocheltree, Elliot, 17

Designing Aerodynamic Shapes Through the Novel Combination of Computational Fluid Dynamics, Pressure Difference Minimization and Erosive Techniques

Pawling

Trinity-Pawling School

Wang, Ziqing, 18

Immobilization of Polymer Dots Grafted TiO₂ Nanohybrids on Gauze for Photodegradation of Organic Pollutants

Pelham

Pelham Memorial High School

Wong, Caitlin, 17

Assessing the Plasticity of Pain Through the Lens of People with Limb Loss

Plainview

Plainview-Old Bethpage John F. Kennedy High School

Philip, Stefan, 17

Forecasting the Progression of Temporal Orientation Through the Language of Social Media Using Machine Learning

Port Washington

Paul D. Schreiber High School

Bercow, Jolie, 18

The Effect of Herbivory on Neighboring Plant Reproduction in *Asclepias syriaca* (Common Milkweed) Dominated Communities

Levin, Emma, 18

Identifying United States Hurricane Risk With Changing Climate

Taylor, Leah, 17

The Effect of Celebrity Political Endorsements on Instagram on Activism Among High School Students

Putnam Valley

Putnam Valley High School

Rippon, Dora, 17

Determining the Minimum Mass of a Habitable Planet by Studying Atmospheric Oxygen Escape

Rochester

Brighton High School

Raynor, Maia, 17

Oxidation of Copper Zinc Alloy

Roslyn Heights

Roslyn High School

Ke, Adrian, 17

The Enticement of Embellishment: The Effect of Graph Embellishment on Comprehension, Memorability, and Perceptions of Trustworthiness

Lee, Brandon, 18

Evaluation of Albumin-Based Therapeutics: The Safety and Efficacy of Albumin Fusion on Half-Life Extension, Tissue-Specific Trafficking, and Toxicity

Rahman, Mayeesa, 17

Can You be Just a Little Bit of a Cheater? Perceptions of Academic Dishonesty

Rust, Lindsey, 18

Baseball Diamonds Are Not A Girl's Best Friend: The Effect of Sport, Coach Gender, and Participant Gender on Attitudes Towards and Perceived Salaries of Coaches

Schiavo, Justin, 18

The Effect of the Aerospike Nozzle on the Hybrid Rocket Engine

Saint James

Smithtown High School East

D'Amore, Anthony, 17

Habitat Preference Drives Brain Shape in Crocodylomorphs

Scarsdale

Edgemont High School

Jang, Angie, 18

Investigating the Role of Cell Cycle State During Convergent Extension in *D. rerio*

Shrub Oak

Lakeland Senior High School

Ramaswamy, Jothi, 17

A Machine Learning Approach to Classifying Brain Cell Types Based on Functional Connectivity in the Primary Visual Cortex

Smithtown

Smithtown High School West

Rodriguez, Alexander, 17

A Genomic and Pharmacological Analysis of Adenosine Receptors in the Sea Anemone *Nematostella vectensis*

Syosset

Syosset High School

Lam, Thomas, 17

The Number Rotation Puzzle

Lee, Serena, 17

The Effect of Hydroxychloroquine on Oral Regeneration in *Nematostella vectensis*

Pugach, Spencer, 18

Twitter and the U.S. Senate: Investigating The Relationship Between the Tweets of Senators and Their Internet Popularity

Wang, Michael, 17

Investigating the Neuroprotective Effects of Taurine and Synthetic Taurine Derivatives for the Treatment of Alzheimer's Disease

Upper Nyack

Nyack High School

Jiao, Lucy, 18

Strain Analysis of Al on a Variety of Semiconductors for Clean Superconductor-Semiconductor Interfaces

Webster

Webster Schroeder High School

Sharma, Anirudh, 17

Optimization of Cone-in-Shell Targets for an X-Ray Backlighter on the National Ignition Facility

Yorktown Heights

Yorktown High School

Satpute, Sayli, 17

A Validation of Sepsis Prediction Scores for Poor Outcome

Shah, Shrila, 17

Improving Lung Cancer Treatment Planning and Delivery Using an Artificially Intelligent Real-time Quantification of Lung Lobe Structures from CT

NORTH CAROLINA

Durham

Yang, Diane, 18

Varying Aspect Ratios of Self-Sustaining Piezoelectric Energy Harvesters

North Carolina School of Science and Mathematics

Gong, Albert, 18

Data Augmentation Using Generative Adversarial Networks: A Novel Machine Learning Framework

Gupta, Abhijit, 18

Effects of Relativity on Quadrupole Oscillations of Compact Objects

Jain, Navami, 18

Development of Integrated Ionic Liquid System for Simultaneous Pretreatment and Biomass Saccharification of Fermentable Sugars

Patil, Aarushi, 17

Inhibiting α -synuclein Aggregation in Parkinson's Disease

Venkatakrishnan, Aarushi, 18

Hypoglycemic Effect of *Momordica charantia* against Type 2 Diabetes Modeled in *Bombyx mori*

Wu, Megan, 18

Optimization and Determination of Goethite-impregnated Powder Activated Carbon (GPAC) Desorption and Regeneration for Bisphenol A (BPA) Adsorption

OHIO

Beachwood

Beachwood High School

Shen, Jing-Jing, 17

Investigation of the Disease Mechanism and Treatment of Diversion Colitis (An *in vitro* Study)

Gates Mills

Hawken School

Hamilton, Claudia, 17

Biodegradable Artificial Blood Vessels: A Novel Method of Tissue Engineering

Shaker Heights

Hathaway Brown School

Cywinska, Greta, 18

Development of an Apparatus for Accurate, Precise Insertion of Intramuscular Electrodes

Toledo

Maumee Valley Country Day School

Jayatissa, Nipun, 17

Engineering and Evaluation of 3D Bioprinted Novel Photocuring Polymer Composite Scaffolds for Bone Tissue Regeneration

OKLAHOMA

Oklahoma City

Oklahoma School of Science & Mathematics

Wang, William, 17

Red Photoluminescent Eu³⁺-Doped Y₂O₃ Nanospheres and Nanosheets as Photon Down-Converters for LED-Phosphor Applications: Synthesis and Characterization

Tulsa

Cascia Hall Preparatory School

Milford, Braden, 17

Developing a Novel Heavy Metal Bioremediation System Utilizing Immobilized Mixed Algae Partnered with Heavy Metal Resistant Microbial Isolates Collected from Contaminated Superfund Mine Sites and Identified with a 16S Ribosomal Subunit Analysis

OREGON

Portland

Oregon Episcopal School

Gupta, Aneesh, 17

Multiple Time-Step Predictive Models for Hurricanes in the North Atlantic Basin Based on Machine Learning Algorithms

Sunset High School

Jin, Kevin, 17

A Fixed Polarity Approach for Optimization of General Binary Quantum Multiplexers

Westview High School

Li, Lauren, 18

Tracing Cell Lineages from Single-Cell Data Using Markov Affinity Estimation

Salem

South Salem Senior High School

Joshi, Megha, 17

Next Generation Intracellular Therapeutic Drug Delivery: A 3-Year Study Using CRISPR/Cas9 Gene Identification and Delivery of Inhibiting Plasmids via Novel Exosomal Targeting

West Linn

West Linn High School

Yu, Jessica, 17

A Deep Learning Based Drowning Detection Surveillance System

PENNSYLVANIA

Allison Park

Hampton High School

Kamel, Kerollos, 18

The Role of Polyploid Hepatocytes in Response to Acute Liver Injury Induced By Acetaminophen Toxicity

Glen Mills

Garnet Valley High School

Mamidala, Sai, 17

Electrochemical Oxidation of Formate on a PdNi/C Nanoparticle Catalyst for Renewable Energy Conversion and Storage

Rosemont

Harriton High School

Weissman, Samuel, 17

Massive Longitudinal HIV Sequencing in Two Subjects on Antiretroviral Therapy Reveals Opposing Selection Pressures on the Treatment Resistant Reservoir and Suggests New Drug Targets

West Doylestown

Central Bucks High School

Anderson, Walker, 18

NP-Completeness of the Five Cells Pencil Puzzle

SOUTH CAROLINA

Columbia

Dreher High School

Androulakis, Anthony 17

Identifying the Neuroanatomical Correlates of Melodic Repetition Using a Novel Computerized Assessment in Stroke Patients

Spring Valley High School

Trifonova, Kristina, 17

The Effect of Hyperaccumulator Biochar Application on Soil Properties and Plant Growth of *Vigna radiata*

TENNESSEE

Brentwood

Ravenwood High School

Liu, Gabrielle, 17

Weight Friction: A Simple Method to Overcome Catastrophic Forgetting and Enable Transfer Learning in Neural Networks

Nashville

Hume Fogg Academic High School

Halbert, Ella, 18

Temperature and Infection Modulate Mosquito Cellular Immunity in an Age-Dependent Manner

Martin Luther King, Jr. Magnet High School

An, Julia, 17

Identification and Characterization of *Helicobacter pylori* Genes Regulating DNA Translocation and TLR9 Activation by the Cancer-Associated cag Type IV Secretion System

Lee, Samuel, 18

Investigating Upregulated Genes Contributing to the Survival of *H. pylori* Under Host-Induced Oxidative Stress

TEXAS

Austin

Liberal Arts and Science Academy

Chiang, Sarah, 17

¹³C NMR Spectroscopy of ¹³C₃ Sodium Pyruvate and ¹³C₁ Alanine in Glioblastoma Cells

Coppell

Coppell Senior High School

Liang, Stephen, 17

Optimization for Deep Convolutional Neural Networks: How Slim Can It Go?

Denton

Texas Academy of Mathematics and Science

Patel, Mira, 17

Effects of a High Glucose Diet on the Unfolded Protein Response of *Caenorhabditis elegans*

Patnaik, Ritik, 17

The Design, Development and Evaluation of a High Security Bimodal Biometric System Using Peripheral Vein Patterns and Fingerprints

Shridharan, Rishi, 18

A Novel Oligodendrocyte Maturation Model with Implications in Demyelinating Disorders

Grand Prairie

Peninsula Academy

Wilhoit, Kayla, 18

Cytoskeletal Incompatibility and Phosphine Resistance in the Red Flour Beetle, *Tribolium castaneum*

Lubbock

Lubbock High School

Zhang, Phyllis, 18

Co-Overexpression of *AVP1* and *PP2A-C5* Increases Plant Tolerance to Multiple Stresses

Plano

Plano West Senior High School

Huang, Vincent, 18

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Jha, Harshika, 17

Remediating the Issue of Dead Zones Through the Utilization of *Vargula hilgendorffii* Bioluminescence in Sync with Underwater Photovoltaic Cells to Induce Visible-Light Water Electrolysis

Suri, Paritosh, 18

Electroencephalogram (EEG) Sensor and Subsequent Analysis System Optimization for Point-of-Care Concussion Diagnostic Tool

Zhang, Eric, 17

Characterizing Inflatable and Quasirandom Permutations

The Woodlands

The Woodlands College Park High School

Dasari, Shobha, 18

Minimizing Arterial Damage Induced by Coronary Stenting

UTAH

Midvale

Hillcrest High School

Cheng, Alexander, 18

Using Machine Learning and Image Segmentation to Analyze Retinal Blood Vessel Growth in Retinal Flat Mount Images

VIRGINIA

Alexandria

T. C. Williams High School

Humphrey, Ana, 18

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Naughton-Rockwell, Tessa, 18

The Correlation of Potential Pesticide Exposure Risk Estimated Through Surrounding Agriculture and *Apis mellifera* Internal Hive Temperature

Thomas Jefferson High School for Science and Technology

Allamsetty, Abhishek, 18

qecML: A Novel Machine Learning Toric Decoder for Rapid Quantum Error Correction

Ardeishar, Adam, 17

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Naidich, Rachel, 18

Non-Invasive Electronic Wireless Knee Biomechanical and Physiology Monitoring for Post-Operative Rehabilitation

Qi, Grace, 17

Evaluating Hydroxycocaines in Hair Samples as Markers of Cocaine Use

Wu, Laurny, 18

Novel Families of Giant Band Gap 2D Topological Insulator Devices in Ethynyl-Derivative Functionalized Lead and Bismuth Films

Wu, Wenbo, 17

Discovery of Topological Insulators with Spintronics Properties in the 2D Materials BiSb, BiSbF₂, and BiSbI₂

Charlottesville

Albemarle High School

Mandal, Mriganka, 17

Novel Egg-Specific Target Immunotherapy Induces Mortality in Lung Carcinoma

McLean

Langley High School

Chen, Alex, 17

Boron-Doped Silicene as a Promising Anode for Li-Ion Batteries

Potomac School

Beaumont, Carolyn, 17

New Analysis Reevaluates the Effect of Water on Silicate Melt Structures by Comparing FTIR and NMR Spectra of Water Interactions with Melts of Albite Under Conditions Mimicking the Upper Mantle

Vienna

Oakton High School

Qu, Carolyn, 17

Monitoring and Predicting Agriculture Drought and Food Security over the Horn of Africa (HOA) with NASA Satellite Remote Sensing Measurements

WASHINGTON

Bellevue

Interlake High School

Saxena, Eshika, 17

HemaCam: A Computer Vision-Enhanced Mobile Phone Imaging System for Automated Screening of Hematological Diseases with Convolutional Neural Networks

WEST VIRGINIA

Charleston

George Washington High School

Morris, Rachel, 18

The Effects of Salinity and pH on Quorum Sensing Systems in *Vibrio fischeri*

WISCONSIN

Milwaukee

University School of Milwaukee

Karan, Aayush, 17

Generating Set for Nonzero Determinant Links Under a Skein Relation

CANADA

Lethbridge, Alberta

Catholic Central High School

Schultz, Marin, 18

Development of a Prosthetic AutoGrasp Control System and Advanced Human-Prosthetic Interface

CHINA

Hefei, Anhui

Hefei No. 1 High School

Bi, Dasheng, 16

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Ahteck, Amanda.....	11	Dasari, Shobha.....	22	Jones, Cameron.....	3
Alag, Ayush.....	3	Desai, Rishi.....	2	Joseph, Rachel.....	16
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Andrews, Sophie.....	10	Doraid, Joseph.....	13	Kalra, Anika.....	13
Androulakis, Anthony.....	20	Duh, Alexander.....	6	Kamarshi, Vivek.....	1
An, Julia.....	21	Dunefsky, Jacob.....	15	Kamel, Kerollos.....	20
Ardeishar, Adam.....	22	Durvasula, Naveen.....	7	Kantipudi, Rohit.....	10
Beaumont, Carolyn.....	23	Eckert, Lucien.....	16	Karam, Julie.....	11
Bercow, Jolie.....	17	Fantell, Gianna.....	10	Karan, Aayush.....	23
Bhandarkar, Riti.....	14	Felmus, Nathan.....	13	Karthik, Ananya.....	2
Bhansali, Rinni.....	14	Ferguson, Samuel.....	11	Kasar, Atharva.....	8
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Bian, Vincent.....	7	Ge, Kelsey.....	14	Khmelnitsky, Olga.....	13
Bi, Dasheng.....	23	Geula, Aaron.....	14	Kim, John.....	1
Bogdanov, Samuel.....	15	Goh, Michelle.....	14	Ko, Jonathan.....	1
Borton, Allison.....	7	Gong, Albert.....	19	Koljaka, Sarah.....	4
Brixi, Garyk.....	7	Gottlieb, Olivia.....	5	Kopecky, Morgan.....	2
Brous, Daniel.....	13	Grossman, Julia.....	15	Krishna, Parthiv.....	9
Cai, Fiona.....	16	Gupta, Abhijit.....	19	Krishnamani, Preeti.....	4
Cai, Grace.....	7	Gupta, Aneesh.....	20	Krishnamoorthy, Vinod.....	3
Cai, Merrick.....	16	Halbert, Ella.....	21	Kudrin, Bertina.....	11
Campagnari, Bianca.....	4	Hallas, Sydney.....	5	Kumar, Chirag.....	13
Case, Paul.....	10	Hamilton, Claudia.....	19	Kumar, Varun.....	11
Chadha, Anjali.....	6	Han, Ivy.....	7	Lam, Thomas.....	18
Chang, Alan.....	12	Hausknecht, Kaylie.....	16	Lange, Noel.....	1
Chang, Justin.....	8	Hawley, Bennett.....	4	Laumas, Anisha.....	4
Chen, Alan.....	11	Heh, Shannon.....	4	Lebenthal, Avalon.....	9
Chen, Alex.....	13	Herath, Isuru.....	7	Lee, Brandon.....	17
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Cheng, Alexander.....	22	Hou, Kaiying.....	8	Lee, Se Ri.....	4
Cheng, Ben.....	4	Huang, Allen.....	3	Lee, Yea Won.....	13
Chen, William.....	13	Huang, Charles.....	4	Levine, Jake.....	12
Chernoff, Rachel.....	12	Huang, Vincent.....	21	Levin, Emma.....	17
Chhaliyil, Pranav.....	6	Huang, Zachary.....	11	Liang, Stephen.....	21
Chieng, Sarah.....	21	Hu, Jiaxuan.....	15	Li, Lauren.....	20
Chi, Sun-Yu Gordon.....	10	Humphrey, Ana.....	22	Lin, Brian.....	3
Chow, Yuen Ting.....	8	Jacobs, Ethan.....	12	Lindholm, Adam.....	7
Colella-Albino, Alessandra.....	12	Jain, Navami.....	19	Lin, Jerry.....	3
Condoleo, Juliana.....	16	Jang, Angie.....	18	Liu, Annie.....	13
Co Ting Keh, Lyron.....	2	Jayatissa, Nipun.....	19	Liu, Gabrielle.....	21
Cui, Laura.....	7	Jha, Harshika.....	21	Liu, Kevin.....	13
Cywinska, Greta.....	19	Jia, Mary.....	1	Liu, Patrick.....	2
Daefler, Anna-Samsara.....	12	Jiang, Kevin.....	10	Long, Mindy.....	1

Lossef, Sam	5	Rothbaum, Joshua	15	Trifonova, Kristina	20
Lu, Christopher	14	Roy, Ronak	3	Tumma, Neehal	9
Lu, Grant	5	Rust, Lindsey	18	Varghese, Leah	1
Lu, Katie	10	Sathyamurthi, Tejas	10	Venkatakrishnan, Aarushi	19
Maheshwari, Eish	16	Satpute, Sayli	18	Wang, Cindy	3
Mai, Michelle	9	Saxena, Eshika	23	Wang, Elizabeth	14
Ma, Jessie	7	Sayana, Ruhi	3	Wang, Ethan	15
Mamidala, Sai	20	Schäffer, Daniel	8	Wang, Michael	18
Mandal, Mriganka	22	Schiavo, Justin	18	Wang, Richard	3
Maniar, Natasha	3	Schultz, Marin	23	Wang, Stanley	4
Mao, Maiya	11	Schwam, Jonah	12	Wang, William	6
Mashal, Jonathan	12	Seever, Rachel	6	Wang, William	19
McGillis, Clare	16	Shah, Dia	15	Wang, Ziqing	17
Michaels, Tai	2	Shah, Sharmi	10	Weiss, Zoe	5
Milford, Braden	19	Shah, Shrila	18	Weissman, Samuel	20
Mishra, Reet	1	Sharma, Anirudh	18	Weltmann, Matthew	14
Mokaya, Michelle	6	Shastri, Ishana	7	Wendt, David	16
Montgomery, Emma	17	Shayani, Gabriella	15	Wheeler, Sydney	6
Morris, Rachel	23	Sheen, Grant	2	Wilhoit, Kayla	21
Muthukumar, Pragati	14	Shekar, Shruthi	15	Willner, Ari	2
Naidich, Rachel	22	Shen, Jing-Jing	19	Wong, Caitlin	17
Narayan, Saaketh	1	Sherr, Heather	14	Woo, Yena	11
Naughton-Rockwell, Tessa	22	Shi, Caleb	11	Wu, Jacob	11
Ocheltree, Elliot	17	Shi, Tesia	7	Wu, Lauryn	22
Pahlavan, Arianna	15	Shi, Yongxin	2	Wu, Megan	19
Pajjuri, Mallika	1	Shridharan, Rishi	21	Wu, Wenbo	22
Patel, Mira	21	Shukla, Manan	16	Xie, Anthony	3
Patil, Aarushi	19	Sierra, Katie	16	Xu, David	15
Patnaik, Ritik	21	Singh, Aditi	13	Xu, Frank	8
Peña-Lobel, Maya	14	Singh, Amol	4	Xu, Guanpeng	8
Perez, Ahmad	12	Situ, Julia	3	Yang, Diane	19
Perlman, Brent	12	Song, Andrew	4	Yang, Madeleine	9
Philip, Stefan	17	Song, Seung Heon	6	Yoo, Seo-Hyun	9
Porter, Imani	5	Specht, Megan	14	Yuan, Bi Tian	16
Pugach, Spencer	18	Srivastava, Shashvat	9	Yue, Siyuan	15
Qi, Grace	22	Stok, Melissa	14	Yu, Jessica	20
Qian, Kevin	8	Su, Angela	8	Yu, Joshua	7
Qu, Carolyn	23	Subramaniam, Vighnesh	10	Zaman, Anu	6
Qu, Steven	8	Subramanian, Madhav	15	Zerof, Eli	13
Quinlan, Anna	1	Sukumar, John	17	Zhang, Anna	13
Rahman, Mayeesa	18	Suresh, Arundhathy	9	Zhang, Eric	22
Ramaswamy, Jothi	18	Suri, Paritosh	22	Zhang, Jiaqi	15
Ravikumar, Akshaya	9	Sussman, Whitney	12	Zhang, Phyllis	21
Rawinski, Alyssa	4	Suthakaran, Vithulan	5	Zhang, Vincent	14
Raynor, Maia	17	Tak, Kendrick	16	Zhong, Amy	2
Ren, Jimmy	5	Tan, Matthew	9	Zhong, Kevin	11
Rippon, Dora	17	Taylor, Leah	17	Zhu, Brandon	17
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About Society for Science & the Public

The Society for Science & the Public is a champion for science, dedicated to expanding scientific literacy, effective STEM education and scientific research. Founded in 1921, we are a nonprofit 501(c)(3) membership organization focused on promoting the understanding and appreciation of science and the vital role it plays in human advancement. Through its acclaimed science research competitions, including the Regeneron Science Talent Search, the Intel International Science and Engineering Fair and the Broadcom MASTERS, and its award-winning magazine, *Science News* and digital media properties, *Science News for Students*, the Society is committed to inform, educate and inspire.

Learn more at:

www.societyforscience.org

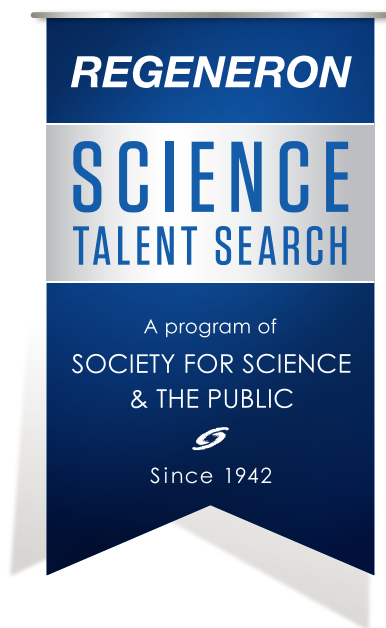
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About Regeneron

Regeneron is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for 30 years by physician-scientists, our science-driven approach has resulted in seven FDA-approved medicines and numerous product candidates, all of which were homegrown in our laboratories. Our medicines and pipeline are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, neuromuscular diseases, infectious diseases and rare diseases.

We work to accelerate and improve the traditional drug development process by developing groundbreaking technologies and conducting ambitious research, including one of the largest genetic sequencing efforts in the world.

We believe that scientists should be the world's heroes and are committed to fostering the next generation of scientific talent through STEM (Science, Technology, Engineering, Math) education and equity efforts. Our STEM programs include the Regeneron Science Talent Search, a program founded and produced by Society for Science & the Public, which has been developing the nation's young scientific talent and fostering future innovators since 1942. In 2016, Regeneron committed \$100 million over 10 years and became only the third title sponsor in the competition's storied 77-year history, following in the footsteps of previous title sponsors Westinghouse and Intel. In addition to the Regeneron Science Talent Search, we support many local and national initiatives with a focus on creating education pathways to careers in STEM, cultivating the best and brightest minds in science research and addressing STEM opportunity gaps for students historically underrepresented in the sciences.

Learn more about our programs at:

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