

REGENERON

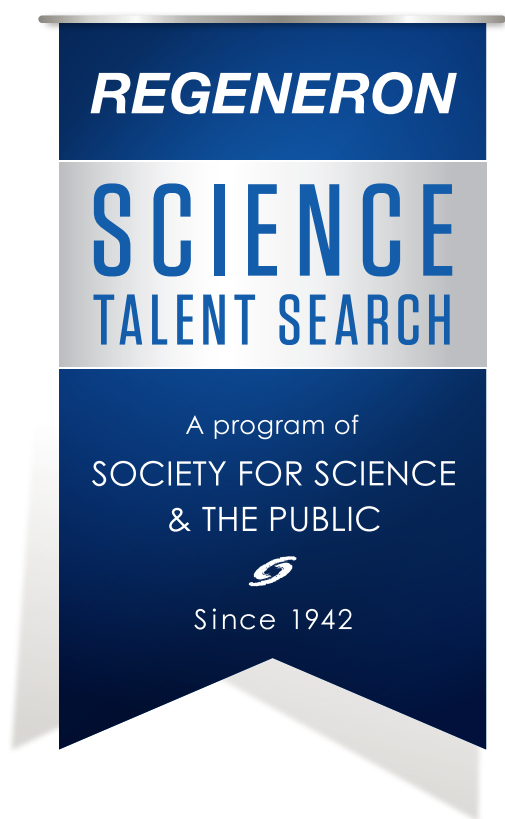
**SCIENCE
TALENT SEARCH**

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**REGENERON SCIENCE
TALENT SEARCH
2020 SCHOLARS**



2020 SCHOLARS

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ARIZONA

Chandler

Hamilton High School***Iyer, Devrath, 17***

Automatically Analyzing Open-Ended Survey Responses Using Statistical and Machine Learning Methods

Scottsdale

BASIS Scottsdale***Hill, Zander, 18***

Upper Bound on the Distortion of Cabled Knots

Tucson

Empire High School***Fosdick, Matthew, 18***

A Novel Approach to Renewable Energy: Light Stimulated Active Cation Transport Membrane via Covalent Modification with a Photoacid

ARKANSAS

Hot Springs

Arkansas School for Mathematics, Sciences, & the Arts***Hwang, Victoria, 18***POLK^{KO} GBM-Derived Cells Exhibit Increased Replication Catastrophe

CALIFORNIA

Arcadia

Arcadia High School***Yeung, Andre, 18***Induction of the Endosymbiotic Gene Transfer Mechanism from Chloroplast to Nuclear Genome in the Green Alga *Chlamydomonas reinhardtii* and Its Role in the Subsequent Evolution of Functional Organelles

Atherton

Menlo School***Lebedeva, Sonya, 18***

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Bakersfield

Stockdale High School***Bose, Rishabh, 17***

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Belmont

Carlmont High School***Sun, Selena, 18***

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- Talmalpais High School**
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- Riverside**
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San Jose

Evergreen Valley High School

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Lynbrook High School

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Notre Dame High School

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Chen, Cynthia, 17

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San Ramon

Dougherty Valley High School

Yang, Janice, 17

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Santa Ana

Orange County School of the Arts

Liu, Bailey, 17

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Saratoga

Saratoga High School

Das Sharma, Bikrant, 17

Power Savings in USB Hub through a Proactive Scheduling Strategy

Studio City

Harvard-Westlake School

Yang, Andrew, 18

Multi-Tissue DNA Methylation Predictors of Average Body and Brain Weights Across Dozens of Mammalian Species

Walnut

Walnut High School

Cheng, Ken, 17

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**COLORADO
Boulder**

Fairview High School

Golla, Anudeep, 17

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Fort Collins

Fort Collins High School

Liu, Megan, 16

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Greenwood Village

Cherry Creek High School

Ijju, Siddarth, 17

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CONNECTICUT

Greenwich

Convent of the Sacred Heart

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West Hartford

William Hall High School

Granquist, Ashley, 17

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Woodbridge

Amity Regional High School

Wang, Sophia, 17

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DELAWARE

Wilmington

Charter School of Wilmington***Xing, Albert, 17***

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FLORIDA

Delray Beach

American Heritage School Boca-Delray***Behara, Eeshani, 17***

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Gainesville

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Eastside High School***Rathinasabapathi, Brindha, 18***

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Jacksonville

Episcopal High School of Jacksonville***Body, Ashton, 18***

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Melbourne

West Shore High School***Shah, Pooja, 17***Density Dependent Signaling in the Model Eukaryote *Chlamydomonas reinhardtii*

Miami

Dr. Michael M. Krop High School***Levy, Ethan, 17***

Efficiency of a Novel Nano-Cardiac Device for Atherectomy of Coronary Artery Occlusion

Orange Park

Ridgeview High School***Chen, Michael, 17***An Investigation into the Distillation of Water from *Pennisetum purpureum* Using Solar Stills to Alleviate the Water Crisis in Uganda

Orlando

Lake Highland Preparatory School***Konda, Sanjana, 17***

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Riviera Beach

Suncoast High School***Kantamneni, Subhash, 18****Precise Stellar Ages: Calibrating Theoretical Stellar Isochrones Using Non-Local Thermodynamic Equilibrium (NLTE) Conditions*

Sebring

Sebring High School***Patel, Rohin, 17***

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- Stuart** **South Fork High School**
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- Tallahassee** **James S. Rickards High School**
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- Vero Beach** **Vero Beach High School**
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GEORGIA

Atlanta

Coretta Scott King Young Women's Leadership Academy

Hester, Lauren, 18

Inducing the Migration of Dying Non-Pathogenic Lymphoma Cells Towards Areas of High T-Cell Concentration with Chemoattractants *in vitro*

The Westminster Schools

Ganesh, Ananya, 18

Early Onset Scoliosis – A Novel Approach to the Assessment and Classification of Pulmonary Function

Marietta

George Walton Comprehensive High School

Sun, Bill, 17

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Milton

Milton High School

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Real-Time Analysis of Emotions for Neurological Disorder Patients

GUAM

Tamuning

John F. Kennedy High School

Kang, Daniel, 17

Paintable Graphene Nanoplatelet Nanocomposites for Low Cost Sustainable Electronics

HAWAII

Hilo

Hilo High School

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Effects of Fragmentation and Isolation on Fish Utilization of Bleached Coral Reefs

IDAHO

Boise

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Predictive Modeling of Wildfire Shape Using Long Short-Term Memory Convolutional Neural Networks

ILLINOIS

Hinsdale

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Skokie

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The Effect of Surfactant Functional Groups on Anode Corrosion and Specific Capacity in Zinc-Air Batteries

INDIANA

Evansville

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Munster

Munster High School***Ostojic, Annie, 17***

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Ames

Ames High School***Kasiviswanathan, Pooja, 17***

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Olathe

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Louisville

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Bangor

Bangor High School***Ifeji, Amarachukwu, 18***

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MARYLAND

Baltimore

Gilman School***Li, Jeffrey, 18***

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Bethesda

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Marriottsville	<u>Marriotts Ridge High School</u> <i>Kim, Hannah, 18</i> Deciphering Active Wildfires in the Southwestern USA Using Topological Data Analysis (TDA) and TDAMapper
Poolesville	<u>Poolesville High School</u> <i>Lolla, Sadhana, 18</i> A Systematic Study to Improve the Performance of SrCoO ₃ as an Anion-Intercalation-Type Electrode for Supercapacitors through Interface, Oxygen Vacancies, and Doping
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Silver Spring	<u>Montgomery Blair High School</u> <i>Mattikalli, Tarun, 17</i> Early Indicators of Osteoporosis in Children and Adolescents Using Finite Element Analysis of Computed Tomography Scans <i>Tang, Michelle, 18</i> Deep Multimodal Learning for the Diagnosis of Autism Spectrum Disorder <i>Xin, Victoria, 18</i> Determining Antihypertensive Medication Efficacy through Machine Learning-Mediated Survival Analyses in a Revascularized Patient Population <i>Yang, Ambrose, 17</i> Analogues of the Robin-Lagarias Criteria for the Riemann Hypothesis <i>Zhao, Zach, 18</i> Clearing Kidney Exchanges via Graph Neural Network Guided Tree Search
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Phillips Academy

Duan, Katherine, 17

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Belmont

Belmont High School

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Boston

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The Effect of Prolonged Morphine Administration on Infant Rat Regional Brain Volumes

Boston Latin School

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Lexington High School

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Newton South High School

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Weston High School

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Shakopee

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Chesterfield

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Eldon

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Kalispell

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Omaha

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Reno

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Exeter

Phillips Exeter Academy

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Basking Ridge

Ridge High School

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East Brunswick**East Brunswick High School*****Zou, Lucy, 17***

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Skillman **Montgomery High School**
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Tenaflly **Tenaflly High School**
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Warren **Watchung Hills Regional High School**
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NEW MEXICO

Farmington **Navajo Preparatory School**
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Los Alamos **Los Alamos High School**
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Los Lunas **Valencia High School**
Gates, Makayla, 18
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NEW YORK

Ardsley **Ardsley High School**
Brahmbhatt, Isha, 17
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Armonk **Byram Hills High School**
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Bedford

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Bellmore

John F. Kennedy High School

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Briarcliff Manor

Briarcliff High School

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Bronx

Bronx High School of Science

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Horace Mann School

Wu, Brian, 18

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Burnt Hills

Burnt Hills-Ballston Lake High School

Shell, Hannah, 17

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Central Islip

Central Islip Senior High School

Zhu, Yu, 17

The Effects of Simulated Microgravity on the Biofilm Production and Susceptibility of *Acinetobacter* Tat mutants

Chappaqua

Horace Greeley High School

Asa, Henry, 18

Deriving the Value of Cryptocurrencies through an Analysis of 95 Global Currencies

Cheng, Holly, 18

Modulating Fetal Globin Levels Using CRISPR/Cas9 in an *in vitro* Mouse Cellular System

Commack

Commack High School

Liao, Kimberly, 18

Identification of a Model Agnostic Disease Driver in Non-Alcoholic Steatohepatitis; Implications for Drug Development

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Wildfire Prediction and Reduction for the West Coast of the USA Using a Neural Network Approach

East Setauket

Ward Melville High School

Klein, Jordan, 18

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Eastchester

Eastchester High School

Toyomura, Maho, 17

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- Glen Cove** **Glen Cove High School**
Khaimov, Nicole, 17
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- Glen Head** **North Shore High School**
Danseglio, Keaton, 18
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- Harrison** **Harrison High School**
Mc Sweeney, Sara, 18
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- Meimeteas, Nasia, 17***
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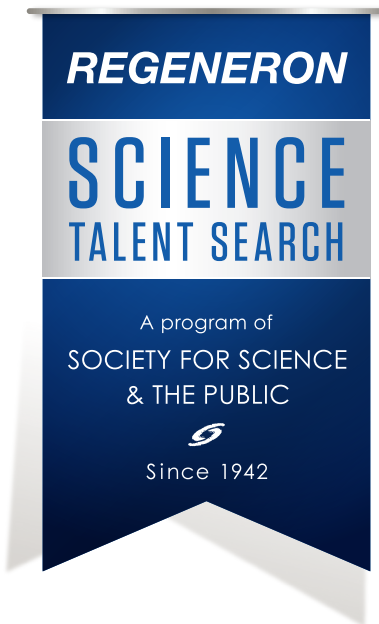
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Regeneron is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for more than 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to seven FDA-approved treatments and numerous product candidates in development, 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, infectious diseases, pain and rare diseases.

Regeneron is accelerating the traditional drug development process through our proprietary VelociSuite® technologies, such as Velocimmune®, which produces optimized fully-human antibodies, and ambitious research initiatives such as the Regeneron Genetics Center, which is conducting one of the largest genetic sequencing efforts in the world.

We believe that scientists should be the world's heroes. We are committed to fostering the next generation of scientific talent by supporting education pathways to careers in STEM. Regeneron supports local, national and global outreach and equity programs with a focus on exciting young students about the power of science, equipping students and teachers with scientific skills and elevating the best and brightest young minds in science research. Our signature STEM initiatives include the Regeneron Science Talent Search and the International Science and Engineering Fair, programs founded and produced by Society for Science & the Public

Learn more about our programs at:

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