

REGENERON SCHOLARS

LI'S GOT TALENT

46 local students singled out in prestigious math/science contest

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Forty-six Long Island students in public and private schools were among 300 high school seniors nationwide named scholars Tuesday in the prestigious Regeneron Science Talent Search, the country's oldest high school competition in math and science.

In the Bethpage district, educators said Bethpage High School senior Smiti Shah — whose research project focused on efforts to increase access to clean water — is their first-ever honoree in the contest.

Shah, 17, called recognition as a Regeneron Scholar an “incomparable honor.”

“Since eighth grade, it's been my goal to achieve semifinalist status, and I had the STS sticker on my wall for four years. Finally achieving this goal is incredible,” said Shah, who was mentored at Hofstra University. Her project involved using biological agents such as coriander and onions to synthesize silver nanoparticles, which then were used to rid *E. coli* from contaminated water.

Jericho High School also made history Tuesday, with 11 scholars named — the most of any district on Long Island, the second-most in the state and the most in the district's recent history. Last year, the high school of about 1,100 students fielded nine scholars, with one earning fifth place in the national finals held in Washington, D.C.

“I didn't think we could beat the number we had last year . . . and to get 11 is mind-blowing,” said Jericho's science research coordinator, Serena McCalla. “The common thread is that they actually allow me to push them as hard as they need to be pushed in order to succeed.”

This year's Regeneron Scholars — who effectively are semifinalists in the competition — are from 18 public school districts across the Island. Twelve Nassau systems, including Hewlett-Woodmere and Syosset, are represented, as are six districts in Suffolk, ranging from Half Hollow Hills in Dix Hills to Setauket-based Three Village.

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Of the districts with more than two honorees, Great Neck has seven — four at Great Neck South High School and three at Great Neck North — while Smithtown has four: three at Smithtown High School East and one at Smithtown High School West.

“My heart started beating so fast, and I called my parents and they are very supportive,” said Smithtown High School West senior Sarah Adamo, 17. “We are over the moon about it.”

In addition to working in her high school lab, Adamo was mentored at Stony Brook University Hospital, where she spent hours focusing on the nervous system of the starlet sea anemone, *Nematostella vectensis*. The organism, one of the first to evolve a nervous system, provides insight into how the nervous system functions, and that can be translated to how the nervous system works in humans, Adamo explained. Her research could lead to potential ways to treat disorders such as addiction and Alzheimer's disease.

North Shore Hebrew Acad-



Science teacher Serena McCalla, center, with 11 Jericho High School students who were named as scholars in the Regeneron Science Talent Search on Tuesday. ■ Video: newsday.com/LongIsland

emy High School in Great Neck and St. Anthony's High School in South Huntington were the private schools on the Island with students who were recognized. A student from Kings Point who attends The Lawrenceville School in New Jersey was named a scholar as well.

“These brilliant students have already made remarkable scientific achievements at a young age, and we are eager to see where their scientific journeys take them next,” Maya Ajmera, president and CEO of Society for Science & the Public and publisher of Science News, said in a statement.

The competition is sponsored by the Society for Science & the Public, which founded it in 1942. It formerly was sponsored by Intel.

Each scholar receives a \$2,000 prize, and individual schools get \$2,000 for each of their recognized students.

The competition will be winnowed down Jan. 23, when 40 finalists are named.

Those students will compete March 8-14 in the nation's capital for prizes totaling more than \$1.8 million. Winners are to be announced March 13.

Smithtown High School East senior Sydney Bracht, 18, said Tuesday she was in Florida to watch her brother run the Disney World marathon during the weekend and still was there when her school called about the forthcoming news from the Regeneron competition. She joined her classmates via FaceTime.

“The announcement came in and even though we weren't physically together, we were still all together,” she said.

Bracht's research focused on worms, specifically *C. elegans*. She studied cell invasion in the worm to investigate genes that regulate the process. Her work

holds a potential connection to human genes in stopping or slowing the spread of cancer.

Jericho senior Mutahara Bhuiyan's research focused on resource sustainability, looking at the viability of cellulose nanofibers — effective adsorbents for water treatment — produced through an innovative method that is not as long or energy consumptive as traditional manufacturing processes. Her parents emigrated from Bangladesh and her heritage has been an inspiration for her research.

On a trip there in 2007, she said she witnessed so much scarcity that she aims to work in environmental sciences and sustainability.

“Ever since then, my goal has been to help people,” said Bhuiyan, 17.

Caroline Smolensky, a senior from Woodbury who attends St. Anthony's High School in South

The Island's honorees

Forty-six Long Island students are among 300 high school seniors nationwide named scholars in the Regeneration Science Talent Search for 2018. Forty finalists will be announced Jan. 23 and compete in March in Washington, D.C.

BETHPAGE H.S.



Smiti Shah

COMMACK H.S.



Daniel Lee



Anoop Singh

GEORGE W. HEWLETT H.S.



Justin Ng



Winnie Xu

GREAT NECK NORTH H.S.



Natasha Dilamani



Amy Shteyman



Megan Xu



Daniel Kim

GREAT NECK SOUTH H.S.



Eric Kuang



Cindy Wang



Michelle Xing

HALF HOLLOW HILLS H.S. EAST



Aditi Patil

HALF HOLLOW HILLS H.S. WEST



Gilbert Spencer

JERICO H.S.



Mutahara Bhuiyan



Andrew Fang



Ishan Gurnani



Marc Huo



Chiu Fan Bowen Lo



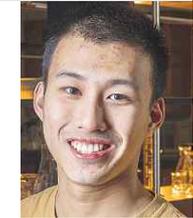
Dennis Lo



Swati Madankumar

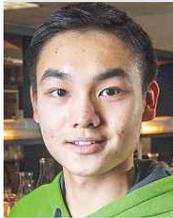


Amber Patrick



Yunyan Wu

JERICO H.S.



Brandon Xie



Kendra Zhang



Matthew Klein



Cameron Levy

KINGS PARK H.S.



Keiffer Acoba

MANHASSET H.S.



Emily Cruz

NORTH SHORE HEBREW ACADEMY H.S.



Scott Soifer

NORTH SHORE H.S.



Audrey O'Brien

PAUL D. SCHREIBER H.S.



Caitlin Maley

PLAINVIEW-OLD BETHPAGE JOHN F. KENNEDY H.S.



Daniel Vieira

ROSLYN H.S.



Spencer Lazar



Vincent Yao

ST. ANTHONY'S H.S.



Caroline Smolensky

SMITHTOWN H.S. EAST



Sydney Bracht



Cindy Li



Shrey Thaker

SMITHTOWN H.S. WEST



Sarah Adamo

SYOSSET H.S.



Justin Cohen

SYOSSET H.S.



Monet Yuan

WARD MELVILLE H.S.



Emily Huang



Michael Lu

THE WHEATLEY SCHOOL



John Li

THE LAWRENCEVILLE SCHOOL IN N.J. (student from Kings Point)



Bradford Lin

Huntington, designed, built and tested a device that could be implanted into the brain to test for any secondary injuries after a traumatic brain injury. She conducted her research at Northwell Health's Feinstein Institute for Medical Research in Manhasset.

She was in theology class at the high school when educators told her she was named a scholar.

"It was very overwhelming, but ex-

citing at the same time," said Smolensky, 16.

Judges selected the first-round winners from 1,818 applicants hailing from 555 high schools in 45 states, Washington, D.C., Puerto Rico and overseas schools.

Last year, the Island had 58 first-round winners. Prize money for winners and finalists in the last round of the competition ranges from \$25,000 to a grand prize of \$250,000.