

Contact:

Lauren Espin
Siemens Foundation
732-590-2182
lauren.espin@siemens.com

Lisa Quirindongo
Dentsu Communications
203-430-3550
lquirindongo@dcinyc.com

**BIOCHEMISTRY AND MATHEMATICS RESEARCH BRINGS STUDENTS CLOSER
TO NATION'S HIGHEST SCIENCE HONOR FOR HIGH SCHOOL STUDENTS****WINNERS OF SIEMENS COMPETITION IN MATH, SCIENCE & TECHNOLOGY
REGIONAL FINALS AT CARNEGIE MELLON UNIVERSITY REVEALED**

**Brian Kim of Bayside, New York Wins Top Individual Prize;
Blake Smith of Oceanside, New York and Vickram Gidwani of Demarest, New Jersey,
Win Top Team Prize**

Pittsburgh, Pennsylvania, November 19, 2011 — The shortlist of contenders for the highest science honor awarded to American high school students narrowed tonight as the winners of the Siemens Competition in Math, Science & Technology Region Four Finals were announced. Research advancing scientists' understanding of geometric shapes earned top honors and the \$3,000 Individual scholarship for Brian Kim of Bayside, New York. Research that may lead to developing a new approach in the treatment of lung cancer won the \$6,000 Team scholarship for Blake Smith of Oceanside, New York, and Vickram Gidwani of Demarest, New Jersey.

The students presented their research this weekend to a panel of judges from Carnegie Mellon University, host of the Region Four Finals. They are now invited to advance to the National Finals in Washington, DC, December 2-5, 2011, where \$500,000 in scholarships will be awarded, including two top prizes of \$100,000. The Siemens Competition, a signature program of the Siemens Foundation, is administered by the College Board.

"The Siemens Competition has a proud history of attracting awe-inspiring research projects from America's best and brightest and we are pleased to see that this year is no exception," said Jeniffer Harper-Taylor, president of the Siemens Foundation. "We can all take heart in the remarkable work being done by this next generation of young innovators as exemplified by Brian Kim, Blake Smith and Vickram Gidwani."

The Winning Individual

Brian Kim, a senior at Stuyvesant High School in New York, New York won the individual category and a \$3,000 college scholarship for project involving the arrangement of not necessarily circular shapes within an area.

His project, *"Packing and Covering with Centrally Symmetric Disks,"* investigated the relationship between how many copies of a given shape can be packed into an area and how few are needed to completely cover the same area.

"Brian's comprehension of this complex area of mathematics showed real maturity," said competition judge Dr. Po-Shen Loh, Assistant Professor of Mathematical Sciences, Carnegie Mellon University. "His remarkable ability to recall concepts and solve problems in real time was matched only by his speaking and presentation skills. He was able to take a very complex issue and make it accessible."

Brian first recognized his passion for math after joining his school's math team. He enjoys running, golf, handball and playing the guitar, piano and trombone. He would like to major in applied mathematics or computer science and dreams of becoming a professor of mathematics at MIT. His mentor is Professor Dan P. Ismailescu, Hofstra University.

The Winning Team

Blake Smith, a senior at Oceanside High School in Oceanside, New York, and Vickram Gidwani, a junior at Horace Mann High School, Bronx, New York, won the team category and will share a \$6,000 scholarship for their biochemistry project, *"Using novel small molecule derivatives to therapeutically modulate erlotinib-resistant lung adenocarcinoma."*

The team performed a series of biological tests on new compounds derived from an antipsychotic drug that had anti-cancer properties. In its original state, the drug has strong side effects on the central nervous system in non-schizophrenic patients preventing its use as a cancer therapeutic. Blake and Vickram showed that these new derivatives retained the anti-cancer properties yet eliminated the effects on the central nervous system.

"Blake and Vickram had a striking command of the cascade of changes that occur when a particular protein malfunctions and promotes cancer development," said competition judge Dr. Brooke McCartney, Associate Professor of Biological Sciences, Carnegie Mellon University. "By demonstrating that these new derivatives of an existing drug have anti-tumor effects, they were able to take the first step toward developing a powerful new strategy for the treatment of lung cancer."

For Blake Smith, the desire to pursue cancer research is personal. In 2006, both of his grandparents were diagnosed with the disease. A senior, he earned a First Award in Cellular and Molecular Biology at the 2011 Intel International Science and Engineering Fair (ISEF). He is vice president of his school's World Interest Club, plays the viola in the symphonic orchestra and is a member of the varsity tennis team. He is the first student from his high school to compete at this level in the Siemens Competition.

Vickram Gidwani is a senior member of his school's fusion club and has competed in the Science Olympiad, Physics Olympiad and JETS (Junior Engineering Technical Society) Competition. He

divides his extracurricular time between music and tennis, as a saxophonist with two school bands and a tennis player on two teams.

The team's mentor is Dr. Goutham Narla, Mount Sinai School of Medicine.

Regional Finalists

The remaining regional finalists each received a \$1,000 scholarship. Regional Finalists in the individual category were:

- Yuwen Cheng, The Bronx High School of Science, Bronx, New York
- Alexandra McHale, Smithtown High School East, St. James, New York
- Priya Mohindra, Yorktown High School, Yorktown Heights, New York
- Christie Wang, Roslyn High School, Roslyn Heights, New York

Team Regional Finalists were:

- Holly Flores, Huntington High School, Huntington, New York and Austin Wild, South Side High School, Rockville Centre, New York
- Camrinn Hanley, The Hotchkiss School, Lakeview, Connecticut and Aneesh Shah, Half Hollow Hills High School East, Dix Hills, New York
- Yon Jang, Thomas Jefferson High School for Science and Technology, Alexandria, Virginia, Hansen Qian, Saratoga High School, Saratoga, California and Matthew Rudin, Half Hollow Hills High School East, Dix Hills, New York
- David Nam, Monta Vista High School, Cupertino, California, Alina Ranjbaran, Garden City High School, Garden City, New York, and Tom Wang, The Wheatley School, Old Westbury, New York

The Siemens Competition

Launched in 1998, the Siemens Competition is the nation's premier science research competition for high school students. An all-time record of 2,436 students registered to enter the Siemens Competition this year for an unprecedented 1,541 projects submitted. Three hundred seventeen students were named semifinalists and 96 were named regional finalists, representing 21 states. Entries are judged at the regional level by esteemed scientists at six leading research universities which host the regional competitions: California Institute of Technology, Carnegie Mellon University, Georgia Institute of Technology, Massachusetts Institute of Technology, University of Notre Dame and The University of Texas at Austin.

Follow the Siemens Foundation on Twitter (www.twitter.com/sfoundation) and Facebook (www.facebook.com/SiemensFoundation) to learn about the remarkable research being done by this year's brilliant Siemens Scholars. Then visit www.siemens-foundation.org at 9:30am EST on December 5 for a live webcast of the National Finalist Awards Presentation.

The Siemens Foundation

The Siemens Foundation provides more than \$7 million annually in support of educational initiatives in the areas of science, technology, engineering and mathematics (STEM) in the United States. Its signature programs include the Siemens Competition in Math, Science & Technology, Siemens Awards for Advanced Placement, and The Siemens We Can Change the World Challenge,

which encourages K-12 students to develop innovative green solutions for environmental issues. By supporting outstanding students today, and recognizing the teachers and schools that inspire their excellence, the Foundation helps nurture tomorrow's scientists and engineers. The Foundation's mission is based on the culture of innovation, research and educational support that is the hallmark of Siemens' U.S. companies and its parent company, Siemens AG. For more information, visit www.siemens-foundation.org.

The College Board

The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of more than 5,900 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success — including the SAT[®] and the Advanced Placement Program[®]. The organization also serves the education community through research and advocacy on behalf of students, educators and schools. For further information, visit www.collegeboard.org.

Video and photos of winners available on request.

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