

ADDING MULTIMEDIA Teen Scientist Researches New Drugs to Fight Flu Pandemic, Wins Intel Science Talent Search

Eric S. Chen of San Diego Wins \$100,000 Award from the Intel Foundation

NEWS HIGHLIGHTS

- Eric S. Chen, whose research could lead to a new class of drugs to control influenza outbreaks during a pandemic, received the top award of \$100,000 at the Intel Science Talent Search 2014, a program of Society for Science & the Public.
- Eric and other finalists from across the United States took home awards totaling \$630,000.
- The Intel Science Talent Search, the nation's oldest and most prestigious high school science and math competition, recognizes 40 high school seniors who are poised to create new technologies and solutions that will positively impact people's lives.

WASHINGTON--(BUSINESS WIRE)-- From new cancer treatments to an exploration of how technology affects the adolescent brain, the innovative research of America's future scientists, engineers and inventors took center stage in the nation's capital today. Honoring high school seniors with exceptional scientific promise, Intel Corporation and Society for Science & the Public (SSP) recognized the winners of the Intel Science Talent Search, the nation's most prestigious pre-college science and math competition.

Eric S. Chen, 17, of San Diego won the top award of \$100,000 from the Intel Foundation for his research of potential new drugs to treat influenza. His interdisciplinary approach combined computer modeling with structural studies and biological validation, with a focus on drugs that inhibit endonuclease, an enzyme essential for viral propagation. Eric, the copresident of his school's fencing team and a junior Olympics qualifier, hopes his work will lead to a new class of drugs to control flu outbreaks during a pandemic, allowing time for a vaccine to be developed.

Second-place honors and \$75,000 went to Kevin Lee, 17, of Irvine, Calif., who developed a mathematical model to describe the shape of the heart as it beats using the principles of fluid mechanics. Kevin's faster and computationally efficient model could provide insights into arrhythmia and may lead to better treatments for the disease.

Third-place honors and \$50,000 went to William Henry Kuszmaul, 17, of Lexington, Mass., who developed a new approach to the mathematics of modular enumeration, which has applications to a wide number of problems in computer science, bioinformatics and



Intel Science Talent Search 2014 WASHINGTON, D.C., March 11, 2014 -Eric S. Chen, 17, of San Diego, Calif. (center) wins the first-place prize of \$100,000 in the Intel Science Talent Search, a program of Society for Science & the Public. Also pictured are finalists Alec Vadim Arshavsky of N.C. (left) and Kathy Camenzind (right) of Calif. The competition recognizes and empowers the most promising young scientists in the U.S., who are creating the technologies and solutions that will positively impact people's lives. computational biology.

"We at Intel celebrate the work of these brilliant young scientists as a way to inspire the next generation to follow them with even greater energy and excitement into a life of invention and discovery," said Wendy Hawkins, executive director of the Intel Foundation. "Imagine the new technologies, solutions and devices they will bring to bear on the challenges we face. The Intel Science Talent Search finalists should inspire all of us with hope for the

future."

Other top honors from the competition include:

Fourth Place: Joshua Abraham Meier of Teaneck, N.J., received a \$40,000 award for his identification of a gene that controls the rapid aging of artificially generated stem cells, which could lead to new treatments for cancer.

Fifth Place: Natalie Ng of Cupertino, Calif., received a \$30,000 award for her development of a diagnostic tool to more accurately predict the spread of breast cancer cells to other parts of the body.

Sixth Place: Aron Coraor of Huntington, N.Y., received a \$25,000 award for his research that may explain why a certain mineral exists in two different forms in the highlands of the moon.

Seventh Place: Zarin Ibnat Rahman of Brookings, S.D., received a \$25,000 award for her research of the effects of increased recreational screen time on adolescent sleep patterns, stress and learning.

Eighth Place: Anand Srinivasan of Roswell, Ga., received a \$20,000 award for his neuralnetwork-based computer model, RNNScan, which "learns" patterns in DNA to predict the boundaries of certain genomic regions. **Ninth Place:** John Anthony Clarke of Syosset, N.Y., received a \$20,000 award for his research of X-ray emissions from the planet Jupiter, a gas giant that harnesses a powerful magnetic field.

Tenth Place: Shaun Datta of North Potomac, Md., received a \$20,000 award for his research that used computer models and equations to improve the understanding of the interactions of nuclear matter.

In total, the Intel Foundation awarded \$1.25 million for the Intel Science Talent Search 2014. When Intel assumed the title sponsorship 16 years ago, it increased the annual awards by more than \$1 million.

This year's finalists hail from 33 schools in 14 states. Of the 1,794 high school seniors who entered the Intel Science Talent Search 2014, 300 were announced as semifinalists in January. Of those, 40 were chosen as finalists and invited to Washington, D.C., to compete for the top 10 awards. These finalists join the ranks of other notable Science Talent Search alumni, who over the past 73 years, have gone on to win eight Nobel Prizes, two Fields Medals, five National Medals of Science, 11 MacArthur Foundation Fellowships and even an Academy Award for Best Actress.

Society for Science & the Public, a nonprofit membership organization dedicated to public engagement in scientific research and education, has owned and administered the Science Talent Search since its inception in 1942.

"Society for Science & the Public proudly joins Intel in congratulating Eric Chen for his impressive research toward potential new drugs for influenza," said Rick Bates, interim CEO and chief advancement officer of SSP. "By linking technology and science to the problems of the world they see around them, Eric and all the Intel Science Talent Search finalists are tomorrow's problem solvers."

To learn more about Society for Science & the Public, visit <u>www.societyforscience.org</u>, and follow the organization on <u>Facebook</u> and <u>Twitter</u>.

Because Intel views education as the foundation for innovation, Intel and the Intel Foundation have invested more than \$1 billion over the past decade, and Intel employees have donated close to 4 million hours toward improving education in more than 70 countries, regions and territories.

To get the latest Intel education news, visit <u>www.intel.com/newsroom/education</u>, and join the conversation on <u>Facebook</u> and <u>Twitter</u>.

Note to Editors: Multimedia is available at: www.intel.com/newsroom/education.

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