District 1 Schools Raising the Bar

Lynbrook & Harker High Schools Produce Talented Scientists

The Intel Science Talent Search (Intel STS) is considered America's most prestigious pre-college science competition. Former participants of this competition, also known as the junior Nobel Prizes, have gone on to make extraordinary contributions to science and hold more than 100 of the world's most coveted science and math honors – including seven Nobel Prizes and three National Medals of Science. Each year, the Intel STS selects 300 students from across the country and abroad as semifinalists (from a pool of approximately 1,700 entrants) to compete for $1.25 million in awards. That list is then narrowed to a select group of just 40 finalists, who are invited to Washington, D.C. to display their work to the public, meet with notable scientists, participate in final judging and compete for the top prize of $100,000.

I am proud to announce that a total of 10 students from District 1's very own Lynbrook High School and The Harker School have found record-breaking success at this year's Intel Science Talent Search 2010. These scholars were chosen from among 1,736 entrants representing 472 high schools in 44 states, the District of Columbia, Puerto Rico and four overseas schools.

Lynbrook and Harker were the only schools in San José that produced semifinalists, and these two schools each had more semifinalists than any other school on the West coast. The Harker School had four of its students selected as semi-finalists. Congratulations to the following Harker semifinalists (their research projects are listed in italics):

Namrata Anand, *A Spectral Analysis of the Chemical Enrichment History of Red Giants in the Andromeda Galaxy Field (M31) vs. Its Dwarf Spheroidal (dSph) Satellites*

Vishesh Jain, *The Prevalence of Hidden Cardiovascular Risk: The Inadequacy of the Standard Lipid Panel*

Kevin Jerry Zhang, *Extracting Information from Spectra of Andromeda Red Giant Stars: Temperature and Chemical Abundance*

Andrew Chen Zhou, *Quantifying the Mix of Stellar Populations in Studies of the Andromeda Galaxy*

Out of eight total entries from Lynbrook High School, six students were named semifinalists. Lynbrook's accomplishment of producing such a high number of semi-finalists in the same year from the same school is not only impressive, but it is uncommon on the West coast. This is a feat normally achieved by schools on the East coast. By placing six students into the semi-finals, Lynbrook ties Harker's record for most students from a California school, set last year. This year, only five other schools across the country had more winners, but they were all science magnet schools, which further highlights the significance of these results. Congratulations to Lynbrook students:

Tony Ho, *Ontology Driven Semantic Annotation Method for Public Microarray Repositories*
David Chienyun Liu, *Semantic Image Retrieval and Interactive Exploration of Large Image Collections*
Akshay Jitendra Maheshwari, *Zergling: An Optimizing Expert System for Linear-Time Detection of Chimeras Formed During PCR Amplification of 16S rRNA*
Ritik Malhotra, *Improving the Sensitivities of Mass Spectrometers for Cancer Drug Discovery and Development*
Tejas Ajay Navaratna, *Application of Semi-major Axis Length Analysis to the Determination of Temperature and Surface Composition of Solar System Objects in Various Stages of Solar Evolution*
Raman Venkat Nelakanti, *Inducing Anaerobic Conditions Using Sulfur Deprivation for Hydrogen Production in Chlamydomonas Reinhardtii*

Each student will be awarded $1,000 for their outstanding research, but their respective schools will benefit as well. To recognize excellence in teaching and school support of individual student research, the Intel STS awards every school $1,000 for each semifinalist named in their competition. This means that Lynbrook and Harker will receive $1,000 for each of their semifinalists, which equates to $6,000 for Lynbrook and $4,000 for Harker. This remarkable achievement was also mentioned in the Mercury News, which you can read by clicking here: http://www.mercurynews.com/search/ci_14183463?IADID=Search-www.mercurynews.com-www.mercurynews.com&nclick_check=1.

On January 27, 2010 (just last week), the Intel STS announced their 40 finalists and three of our students were chosen – two from Lynbrook and one from Harker! Additional congratulations to: Raman Nelakanti and David Liu, seniors from Lynbrook, and Namrata Anand from Harker. Achieving the distinction of being a finalist has also earned each of these students an additional $7,500. They will now have the opportunity to attend the Intel Science Talent Institute in Washington, D.C., which will be held March 11 – 16, 2010. During this trip they, along with the other 37 finalists, will participate in the final judging process and share in $630,000 in awards – the top prize being $100,000. I would also like to highlight that the City of San José had the most finalists from any one city than any other city in the country! Lynbrook's achievement is also the first time that any California school has placed two students into the finals. The Mercury News was on hand when Lynbrook's two finalists were announced at a special school assembly; to read their coverage go to: http://www.mercurynews.com/search/ci_14281170?IADID=Search-www.mercurynews.com-www.mercurynews.com.

Congratulations again to all of these amazing students. What a fantastic achievement! All 10 students will also receive commendations from the City of San José during an upcoming City Council Session. For more information on the Intel science program, click here: http://www.societyforscience.org/sts. You can see a complete list of semifinalists by clicking here: http://www.societyforscience.org/sts/2010/semifinalists and the entire list of finalists here: http://www.societyforscience.org/Page.aspx?pid=497.

Good luck to Raman, David and Namrata in Washington, D.C. We wish you all the best as you represent your schools, your city and the State, at the finals! We are proud of you.

Councilmember Constant and Lynbrook senior David Liu, finalist in Intel Science Talent Search 2010.

Councilmember Constant and Lynbrook senior Raman Nelakanti, finalist in Intel Science Talent Search 2010.