

Connecticut teenager wins \$10,000 IEEE Presidents' Scholarship

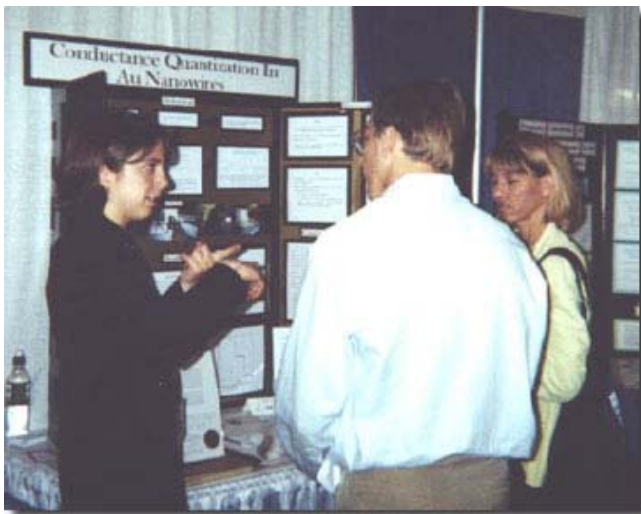
Mariangela Lisanti has won the \$10,000 IEEE Presidents' Scholarship with her project "Conductance Quantization in Au Nanocontacts."



Past President Bruce A. Eisenstein presents the award to Mariangela Lisanti

"I was totally surprised by the scholarship. I was shaking when I went on stage to accept the award," the 17 year old senior from Staples High School, Westport, Conn., USA said after she was presented with the IEEE Foundation supported award on 10 May at the 2001 Intel International Science and Engineering Fair (ISEF) in San Jose, CA.

Lisanti developed a novel technique for measuring conductance quantization in metallic nanowires, using gold as its conductor. It is both faster and less expensive than the three devices commonly used. She plans to publish her findings this summer, after additional research.



IEEE Presidents' Scholarship winner Mariangela Lisanti talks about her project to judges Mark Zdeblick and Julie Kenrow

"I got interested in physics because it was the first subject that challenged me in High School. I couldn't just figure it out, and the obvious answers were never right." Lisanti said. In the summer of 2000, a school advisor was able to put her together with the person who became her science mentor, a young Yale professor, Mark Reed. "I wanted to learn about quantum mechanics and thought the best way was to try a practical application in condensed matter physics."

"There are a lot of tough times when you're doing research and you have to be lucky," said Lisanti, "but my motto is, the more hard work you put into it will increase the probability that you'll be lucky." "This intelligent, bright, charming, and personable young lady will bring honor to IEEE for having the prescience to have recognized her talent early in her career," said IEEE past President Bruce Eisenstein who traveled to San Jose to present the award. "I predict that she will be heard from in the future, and the fact that IEEE helped make it possible for her to become a success is to our credit. That's what an awards program is about: Honor those who deserve it, so that they can do even more and so further honor the presenter."

Most of her friends are on the engineering team that she founded her sophomore year at Staples. This year the team she captains took a first at Washington DC in the National Engineering Design Challenge run by JETS. When she couldn't be with her friends they emailed and telephoned each other their support.

The Scholarship is the only Institute-wide scholarship awarded to a pre-college student. The Fair audience reacted with "ooohs" when the amount of the Scholarship was announced. It is the largest special award given by an organization at Intel ISEF.

IEEE Lead judge Keith Gudger, Santa Clara Valley Section, fielded a team of 14 judges, including Rachel Wilson, who will serve as Lead Judge for the 2002 Intel ISEF, to sort through the 1230 projects. Region 6 awarded 11 separate awards at the Fair. Finalists hailed from 43 countries, Argentina through Venezuela, Native American Indian lands, and 47 of the United States. Lisanti has won many awards, among them, the 2001 Intel Science Talent Search, ISEF Best in Category in Physics, and the Glenn T. Seaborg Nobel Prize Visit Award.