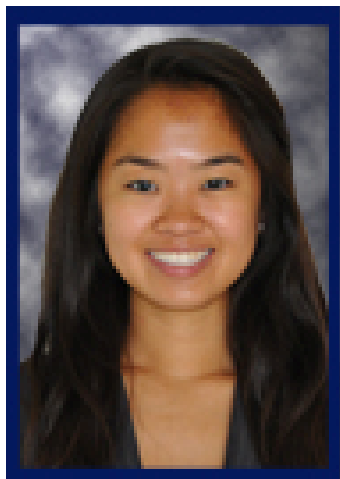


**Davidson Fellow****Lucy Wang**

\$25,000 Scholarship Recipient

**Personal Info**

Age: 17

Garnet Valley, Pennsylvania

**School, College and Career Plans**

A rising senior at Garnet Valley High School, Lucy plans to double major in biology and economics at a university on the East Coast, she hopes to continue on to medical school.

**Davidson Fellows Submission: Mathematics**

In her project, "Predicting Adolescent Depression: A Secondary Analysis of Youth Risk Behavior Surveillance Survey," Lucy developed a predictive model to detect adolescent depression with an overall correct classification of 83.66 percent. Untreated

depression is the number one cause of suicide and the third leading cause of death among teenagers. Using factor analysis and logistic regression, she focused on quantifying variables that may lead to adolescent depression, including student self-reported experiences and demographics. Lucy's model will offer a robust instrument for school psychologists to evaluate the risk of future depression.

**Biography**

Lucy's entire education has been in public schools. She has always been willing to challenge herself and make the extra effort. In the second grade, she was selected for the gifted program, in the third grade, she entered the accelerated math program. Lucy has taken seven Advanced Placement (AP) classes in her sophomore and junior years and will continue with these classes as a senior. She feels her analytical and problem solving skills have developed through these programs.

When two teenage girls committed suicide on the train tracks near Lucy's home, she was prompted to develop a quantitative tool to predict adolescent depression. Most existing studies focus on treatment of the disorder. The greatest challenge of her project was in the survey data; it was difficult to extract independent variables for building the model. Any questions regarding her project, she directed to a professor at the local university, however, the knowledge, attitude and ability to overcome obstacles are skills she developed through her experiences at school.

In addition to academics, Lucy is passionate about music, art and sports. She started playing the violin at age six and has journeyed from student to the concertmaster of a youth orchestra to a violin teacher. A graphite pencil drawing of Lucy's was chosen for the Congressional Art Competition. She plays varsity field hockey for her school.

*Please see next page.*



**Davidson Fellow**  
**Lucy Wang**  
(cont.)

- 2011 Davidson Fellow
- 2011 Young Epidemiology Scholars (YES) Competition Regional Finalist
- 2011 Future Business Leaders Region 19 Competition First Place in Business Calculations
- 2011 College of Medicine, Drexel University Research Intern
- 2011 Department of Public Health, Temple University Research Intern
- 2011 Annenberg Science Symposium
- 2011, 2010, 2009 Distinguished Honor Roll
- 2010 Award of 2010 7<sup>th</sup> Congressional District Art Competition
- 2010, 2009 Delaware Valley Young Musicians' Orchestra Concertmaster

**Community Activities**

Lucy volunteers for the Interact Club at her high school, where she has organized activities for the elderly, the district craft fair and Winterfest. She also volunteers for a local medical practice to learn about the healthcare business. Lucy mentors elementary school students who need extra help with learning or socializing.