



**Davidson Fellow
Danielle Lent**

(\$25,000 Scholarship Recipient)



Personal Info

Danielle Lent
Age: 17
Cedarhurst, New York

School, College and Career Plans

Danielle is a recent graduate of Stella K. Abraham High School for Girls and plans to take next year off and pursue religious studies in Israel. Upon Danielle's return, she will attend Yeshiva University where she plans to major in Chemistry. Danielle hopes to become either a doctor or a physician scientist.

Davidson Fellows Submission (*Science*)

In her project, "Optimizing Recycled Polymer Blends Using Supercritical Carbon Dioxide," Danielle developed a method of recycling plastics that is cost-efficient and environmentally friendly. By exposing polymers to supercritical carbon dioxide, a phase of carbon dioxide that exhibits unique properties as a solvent, Danielle created a process of recycling that produces plastics that have equal or superior properties of the original material allowing for their continued use. Danielle's process does not release toxins and may create a net loss of carbon dioxide.

Biography

Danielle's high school is a dual curriculum school; in addition to academic courses, she took Judaic Studies, ending her school day after 5 p.m. Danielle took several Advanced Placement classes ranging from English Language to European History and Calculus and Physics.

Danielle has always been passionate about science and had to overcome many challenges during her research. One such challenge was the four-hour round-trip train ride to the Stony Brook Lab where she did her research. These train rides, many of which were very late at night, caused Danielle to have to work her research around the train schedule and analyze much of her data on the train. Strong support from family and teachers helped her persevere through these difficulties.

Danielle is a Siemens Westinghouse Semifinalist and won the Ricoh Award for Sustainable Development. She also enjoys skiing, drumming, reading, cooking and trivia.

Please see next page.



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(Cont.)

Honors/Awards

- 2007 Davidson Fellow
- 2007 New York State Scholarship for Academic Excellence
- 2007 International Science and Engineering Fair Third Place Grand Award
- 2007 Ricoh Award for Sustainable Development
- 2007 Nassau County Woman of Achievement
- 2007 Anne Scheiber Scholarship Winner
- 2006-2007 Garcia Summer Scholars Research Program
- 2006 Siemens Westinghouse Semifinalist
- 2005-2007 National Honor Society Member
- 2005 Science Olympiad Gold Medal
- 2004 National Merit Competition Commended Student
- 2004 International Bible Contest Finalist

Community Activities

Danielle was the editor-in-chief and layout editor of her school's newspaper and literary journal. She also served as the captain of the college bowl and Bible bowl teams and was a member of the Model Congress. Danielle is the chapter head of the Jewish Education Program of Long Island, an umpire for local Little League Baseball and a tutor and care-giver of a child whose mother was awaiting a liver transplant.

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