



**Davidson Fellow  
Yael Dana Neugut**

(\$25,000 Scholarship Recipient)



**Personal Info**

Age: 17  
Teaneck, New Jersey

**School, College and Career Plans**

A graduate of The Frisch School and accepted early decision to Columbia College, Dana plans to major in chemistry. Deferring her matriculation at Columbia for one year, Dana will study Talmudic law in an intensive program at Migdal Oz in Israel. She plans to attend medical school and become a physician and scientific researcher.

**Davidson Fellows Submission** (*Science*)

In her project, "A Study of Arsenic Metabolism & Renal Function in an Arsenic-Exposed Population in Bangladesh," Dana found that the association between urinary excretion of arsenic metabolites and creatinine is likely due to their shared metabolic pathway, and that creatine may be an effective way to prevent and treat long-term exposure to arsenic. More than 100 million people worldwide are chronically exposed to high levels of arsenic and are at risk of serious diseases, such as cancer and heart disease. A randomized trial of creatine supplementation is currently underway in Bangladesh.

**Biography**

Dana attended a yeshiva high school where, in addition to the standard high school curriculum, she also studied the Bible in Hebrew and Talmud in ancient Aramaic, as well as other Jewish religious subjects. Additionally, in order to better understand the scientific articles she was reading for her Davidson Fellows project, she took a graduate-level biostatistics course at Columbia University's Mailman School of Public Health.

During winter break of her junior year, Dana joined the principal investigator of her research on a trip to the rural areas of Bangladesh. There she visited a clinic, met many of the Bangladeshi scientists and study participants, watched interviews being conducted and samples drawn. This trip gave her more perspective on the breadth of the study and how significant it was to the Bangladeshis.

Dana was editor-in-chief of her high school yearbook and the foreign language journal, as well as captain of both the math team and the chess team.

In her spare time, Dana enjoys playing piano and reading.

*Please see next page.*



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*(Cont.)*

**Honors/Awards**

- 2009 Davidson Fellow
- 2009 Valedictorian, The Frisch School
- 2009 National Merit Scholarship Winner
- 2009 Intel Science Talent Search, Semifinalist
- 2009 Young Epidemiology Scholars Competition, Regional Finalist
- 2009 Edward J. Bloustein Distinguished Scholar
- 2009 Robert C. Byrd Honors Scholarship Winner

**Community Activities**

Dana served as a mentor to underclassmen and as class representative for her high school's charity/benevolent society. For the past few years she has volunteered weekly at a group home for mentally challenged adults.

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