

# Davidson Fellow Mandeep Virdi

(\$10,000 Scholarship Recipient)



### **Personal Info**

Mandeep Virdi

Age: 17

Plainview, N.Y.

## School, College and Career Plans

Mandeep graduated from Plainview Old Bethpage High School in the Class of 2003 and will attend Massachusetts Institute of Technology (MIT) this fall. At MIT, she plans to major in chemistry and continue her research on new anticancer agents.

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

Mandeep recognized the need for a new anti-cancer drug to achieve better targeting of cancer cells through increased water solubility and reduced cytotoxic effects. In her project titled "The Synthesis of a Taxoid Porphyrin Conjugate for Selective Drug Delivery," Mandeep's drug delivery research advances a powerful anti-cancer strategy that combines the advantages of chemotherapy with photodynamic therapy without some of the common reactions of hypersensitivity.

#### **Biography**

As a young child, Mandeep was intrigued by science – a subject in which she has continued to excel. Mandeep is an Intel Science Talent Search Semifinalist, International Engineering and Science Fair Finalist, Science Olympiad Gold Medalist and Dupont Science Challenge National Semifinalist. Her research has appeared on PBS's "Young Scientists."

Mandeep was editor of her high school newspaper and a member of many award winning academic teams, such as Mathletes and the Science Olympiad. She also played French horn in her school orchestra, in the marching band and in the wind ensemble as first chair.

In her free time, Mandeep enjoys bike riding, playing the French horn and reading.

Please see next page.



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(Cont.)

#### Honors/Awards

- 2003 Davidson Fellow
- 2003 Simons Fellow
- 2003 SUNY Stony Brook Research Symposium, Presenter
- 2003 AP Scholar
- 2003 Who's Who Among American High School Students
- 2002 Long Island Science & Engineering Fair (LISEF), Second Place
- 2002 SUNY Stony Brook Research Symposium, Presenter
- 2002 Science Olympiads: Regional Competition, First Place
- 2002 NYSSMA (New York State School Music Association): Level Six Solo on French Horn, Gold Medal
- 2002 Excellence in Independent Research, Physics, AP Biology, and Mathematics Awards
- 2002 Tri-Music Honor Society
- 2002 National Honor Society

### **Community Activities**

Mandeep is not only a scholar, but also actively helps the community and those suffering with cancer as Vice President of Youth Against Cancer, a club at her school. Mandeep also volunteers at the local Sikh temple, and teaches children to read and write in her mother tongue, Punjabi.

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