



**Davidson Fellow
Adam Solomon**

(\$25,000 Scholarship Recipient)



Personal Info

Adam Solomon
Age: 17
Bellmore, New York

School, College and Career Plans

Adam is a recent graduate of John F. Kennedy High School and will be attending Yale University where he plans to major in Astronomy and Physics and hopes to move on to University of Cambridge for a master's then on to Caltech or Harvard for a doctorate degree.

Davidson Fellows Submission (*Science*)

In his project, "The Effects of Age on Brown Dwarf Spectral Features in the Near-Infrared," Adam studied the optical and near-infrared spectra of brown dwarfs, celestial bodies that resemble stars but emit little light because they are too small to ignite the central fusion of hydrogen. By looking at near-infrared spectral signatures that seem to be caused by low pressure, Adam created an analytical tool for estimating a brown dwarf's age and mass. Adam's research can help unlock clues about stellar evolution and formation, the history of our galaxy, and the formation of planetary systems.

Biography

Adam has been accelerated through math classes his entire academic career and as a sophomore he enrolled in his high school's Authentic Science Research program hoping to be involved in astrophysics research. Adam lacked the physics background needed to participate in meaningful research with a mentor so he took a college-level physics course to prepare.

As a junior, with interests in physics, Adam knocked on doors at Columbia University until he met his current mentor who he has been working with for two years researching brown dwarfs and exploring the cosmos .

Adam believes that science fulfills the basic human instinct of curiosity and he hopes to satisfy that curiosity by continuing his astrophysics research. Adam's findings will be published in *Publications of the Astronomical Society of the Pacific* and *The Astrophysical Journal*. He has also presented his research to the American Astronomical Society and will present at the conference Cool Stars 14 in November.

Adam also likes to play the classical and flamenco guitar and run on his high school's track team. He was also the editor of his high school's newspaper.

Please see next page.



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(Cont.)

Honors/Awards

- 2006 Davidson Fellow
- 2006 Intel Science Talent Search, 8th Place Finalist
- 2006 Siemens Westinghouse Competition, 3rd Place Finalist
- 2005, 2006 National Honor Society
- 2005, 2006 New York State Science Society
- 2004, 2005, 2006 National Spanish Honor Society
- 2005 Advanced Placement Scholar with Distinction
- 2005 New York State Science Congress Research Competition Winner
- 2005 Science Olympiad Winner

Community Activities

Adam participated in the Polytechnic University Summer Science Research Program and created a computer program to analyze software metrics.

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