



**Davidson Fellow
Stephanie Hon**

(\$10,000 Scholarship Recipient)



Personal Info

Stephanie Hon
Age: 17
Fort Myers, Florida

School, College and Career Plans

Stephanie will attend Harvard University in the fall. She is currently undecided in her major but will explore the possibility of continuing Alzheimer's disease research. As for a career, Stephanie wants to travel and make a difference in the world.

Davidson Fellows Submission (*Science: Medicine*)

In her project titled "The Effects of Intracerebroventricular Passive Immunization on the Deposition of Beta-Amyloid," Stephanie researched Alzheimer's disease based on the extracellular deposition of beta-amyloid in the cortex and hippocampal regions of the brain that result in neuritic amyloid plaques. Stephanie investigated a different way to deliver antibodies into the lateral ventricle, a cavity in the brain filled with cerebrospinal fluid. Her findings suggest that it may be possible to reverse the effects of Alzheimer's by reducing the beta-amyloid deposits through intracerebroventricular passage immunization followed by an intraperitoneal treatment.

Biography

Stephanie has witnessed how Alzheimer's disease affects people's lives through caring for her grandmother. During the past few years, Stephanie has observed her grandmother's steady decline. Through her research, Stephanie feels that she has done something for her grandmother that no one else in her family has been able to do: find a potential means of treatment for this devastating disease.

After Stephanie completed a year-long literature review on Alzheimer's disease research as part of the independent science research program at her high school, her high school adviser, Dr. Betsy Glass, helped her get in contact with the Alzheimer's Research Laboratory at the University of South Florida. Dr. Donna Wilcock served as Stephanie's mentor for this research project.

Stephanie used to play competitive and varsity soccer but stopped after having two ACL injuries and knee reconstructions within a year of each other. She has played violin since she was 5 years old, and this past year was assistant concert master of the Southwest Florida Youth Symphony Orchestra. She also enjoys riding horses.

Please see next page.



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(Cont.)

Honors/Awards

- 2005 Davidson Fellow
- 2005, 2006 National Honor Society District 18 President
- 2005, 2004 French Academic Team President
- 2005, 2004, 2003 National Honor Society
- 2005, 2004, 2003 French National Honor Society
- 2005, 2004, 2003 Mu Alpha Theta Math Honor Society
- 2005, 2004, 2003 Model United Nations
- 2005, 2004, 2003, 2002 French Academic Team

Community Activities

In 2004, Stephanie volunteered at Health Park Medical Center.

She was also a peer tutor from 2002-2005, as well as AP Biology Lab Prefect 2003 through 2005.

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