



Davidson Fellow

Ann Chi

(\$10,000 Scholarship Recipient)



Personal Info

Ann Chi

Age: 17

Terre Haute, IN

School, College and Career Plans

Ann graduated as one of two valedictorians at Terre Haute South Vigo High School with a perfect 4.0 GPA and perfect ACT and SAT I scores. She will attend Harvard College in the fall and is considering a double major in physics and math. She will pursue a career as either a research scientist for an aerospace company or as a university professor.

Davidson Fellows Submission (*Science*)

In her project titled "H₂ and C₂H₄ Elimination Pathways in the Y + C₂H₆ Reaction," Ann Chi used computer technology to study the fundamental reaction of metals with organic compounds and to identify a new way of understanding how and why these reactions take place. Ann's computational chemistry research builds on previous scientific research on transition metals and in hydrocarbon chemistry, a field important to many critical industries and in the production of a wide variety of commonly used products. Applications of Ann's work include the potential development of new metal catalysts.

Biography

Having learned arithmetic at the age of two, Ann was able to proceed through mathematics at an accelerated speed; by the time she entered high school, she had already finished Algebra I, Algebra II, and Geometry.

Having exhausted all available math and science classes by the end of her sophomore year, Ann began classes at Indiana State University. In addition to her schoolwork, she attended educational programs such as Space Camp, Point Counterpoint, the Program in Mathematics for Young Scientists (PROMYS), and the Research Science Institute (RSI).

Ann's interest in computational chemistry began after her freshman year in high school when her AP chemistry teacher suggested she pursue her interest in the hydrogen bonding properties of water using a program called ChemViz. Ann recognized the beauty and usefulness of computational chemistry which led her to work with Dr. Eric Glendening at Indiana State University on organometallic reactions.

Ann is involved with Latin clubs and the Crossroads of America Youth Orchestra, of which she is the concertmaster. Other pastimes include playing the violin and piano, playing golf, and reading science fiction.

Please see next page.

The Davidson Institute for Talent Development

9665 Gateway Drive, Suite B | Reno, NV 89521 | Ph: 775-852-3483 | Fax: 775-852-2184



Davidson Fellow
Ann Chi
(Cont.)

Honors/Awards

- 2004 Davidson Fellow
- 2004 All-USA Academic High School, First Team
- 2004 Presidential Scholars, Semi-Finalist
- 2004 Intel Science Talent Search, Eighth place
- 2004 Siemens-Westinghouse Competition, Semi-Finalist
- 2004 Horace Mann Student Scholarship, Top Prize
- 2004 Indiana Academic All-Star
- 2004 National Merit Scholars, Finalist
- 2004 Indiana Academic All-State Golf Team
- 2003 USA Physics Olympiad, Semifinalist
- 2003 USA Biology Olympiad, Semifinalist
- 2001 – 2004 USA Chemistry Olympiad, Semifinalist
- 2000 – 2002 USA Math Olympiad (Finalist, 2002)
- 1998 – 2004 Indiana Math League, First Place
- Discover Card Indiana Gold I Winner in Science and Technology, \$2500 scholarship

Community Activities

In addition to using her math talents by tutoring her former middle school in Mathcounts practices, Ann volunteered at the Honey Creek Math Camp in 2004. For several months in 2002, she helped teach Latin at Dixie Bee Elementary School.

Ann's musical talent as a violinist has been heard at community events, including: Arts Fest Crossroads of America Youth Orchestra (2002, 2003); Special Olympics Music Tent (2002); Mayor's Reception of Miss Indiana State Pageant (2002, 2003) and the Honey Creek Mall Christmas Concert (2000, 2001, 2002, 2003).

###