

Davidson Fellow Benedict Shan Yuan Huang

(\$10,000 Scholarship Recipient)



Personal Info
Benedict Shan Yuan Huang
Age: 17
Coram, New York

School, College and Career Plans

Benedict is a recent graduate of Longwood Senior High School and has taken several math courses at State University of New York (SUNY) at Stony Brook. He will attend Harvard in the fall and, though he is undecided at the moment, will most likely pursue a degree in science while also studying piano.

Davidson Fellows Submission (Science: Particle Physics)

In his project "Changed Particle Production in High Energy Nuclear Collisions," Benedict developed a technique of determining charged particle multiplicity during high energy nuclear collisions by studying Quark Gluon Plasma, a form of matter that only existed naturally during the first few nanoseconds after the Big Bang. Simplifying the handling of data in this area of particle physics, Benedict's technique reduces intrinsic errors and promises to supplant previous techniques to analyze Quark Gluon Plasma, leading to faster and more accurate results in the investigation of the fundamental structure of matter.

Biography

In combination with his passion for physics, and especially particle physics, Benedict's interest in scientific research compelled him to begin working at the Brookhaven National Laboratory, in hopes of discovering a possible research topic. While high school science classes gave Benedict a good foundation, his research required him to study independently. To finish his project, Benedict enlisted the help and guidance of Professor Thomas K. Hemmick and Dr. Lucinda Hemmick.

Benedict is a member of the Math, Science Bowl, Science Olympiad and Robotics teams, in addition to the Quiz Bowl and Chess teams. As a member of these teams, he has won numerous awards at the county and state levels.

Benedict is also an accomplished pianist, performing in numerous public recitals throughout the years. In addition, he is an All-State level trombonist, having participated in the 2004 New York All-State Symphonic Band. He has also played in concert, marching and jazz bands, and in symphonic orchestras. Benedict also enjoys origami, badminton, horticulture and swimming.

Please see next page.



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(Cont.)

Honors/Awards

- 2005 Davidson Fellow
- 2005 Intel Science Talent Search Finalist
- 2005 Lucent Global Scholar
- 2004 New York All-State Symphonic Band Member

Community Activities

Benedict helps the community through his membership with the local chapter of the Rotary Interact Club and as treasurer of his high school's chapter of the National Honor Society, his participation in which has helped raise funds for many charities.

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