



**Davidson Fellow  
Harish Khandrika**

(\$25,000 Scholarship Recipient)



**Personal Info**

Harish Khandrika

Age: 17

La Jolla, CA

**School, College and Career Plans**

Harish is a recent graduate of La Jolla High School. He will attend the University of California, Berkeley this fall, majoring in astrophysics. He also plans to pursue graduate studies in space sciences. Harish intends on becoming a space science researcher.

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

In his project titled "Analysis of X-Rays from the Core of Radio-Galaxy Centaurus A," Harish Khandrika analyzed data gathered by NASA from Centaurus A, the closest radioactive galaxy, and proved the existence of a super-massive black hole. By devising a computer script to analyze NASA data, Harish studied the radiation emitted from Centaurus A to gain insight into the galaxy's composition. His work tested laws of physics that scientists are unable to replicate on Earth due to gravity and atmosphere. The computer scripts Harish developed can be used by astrophysicists to expedite future research.

**Biography**

Ten years ago, Harish immigrated to the United States from India with his parents and is now a permanent US resident. His interest in cosmology began five years ago when a book by Stephen Hawking revealed the wonders of the universe. The subject continued to fascinate Harish, and in the last three years, he has worked with astrophysicist Dr. Richard Rothschild at the Center for Astrophysics and Space Sciences (CASS) at the University of California, San Diego.

Each summer beginning in 2001, Harish has studied under Dr. Rothschild, investigating high-energy phenomena. Harish finds this work challenging because he must apply logic, intuition and imagination to find answers.

Harish has presented at the Regional and International Science Fairs and at the 2003 New Zealand National Science Fair.

His research appears in both *IAPPP Communications* and *Astrophysical Journal*.

When Harish is not using his telescope to observe the sky, you might find him playing badminton, singing Carnatic songs, or tracing his ancestry.

*Please see next page.*



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*(Cont.)*

**Honors/Awards**

- 2004 Davidson Fellow
- 2004 La Jolla Foundation Scholarship
- 2003 National Science Teachers Association/Toshiba Exploravision National Level First place winner
- 2003 Kiwanis Foundation award and trip to New Zealand
- 2003 Dr. Seuss Scholarship
- 2003-2004 Outstanding Leadership and Service Award, and Scholarship from the Greater San Diego Science and Engineering Fair Management Committee
- 2002 Priscilla and Bart Bok award by the American Astronomical Society at the Intel International Science and Engineering Fair (ISEF) 2002 Louisville, KY
- 2002 Southern California Junior Science and Humanities Symposium, semifinalist
- 2001 Biogeneius Award, BIO 2001 International Convention
- 2001 Biomedical Research Award
- 2000-2004: Five year participation in Greater San Diego Science and Engineering Fair with Honors and Awards

**Community Activities**

Harish has served the Student Advisory Board of the Greater San Diego Science and Engineering Fair in several capacities since 2001. This past year he served as co-chair.

For the past two years, Harish has volunteered with the San Diego Humane Society helping with cleaning and feeding small animals and is a trained dog-buddy

In addition, Harish has also volunteered on the San Dieguito River Park Trail Maintenance and Habitat Restoration teams since 2002. As a volunteer he helps to restore and maintain native habitats for local birds and to maintain hiking and biking trails.

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