

HARDAVE S. KHARBANDA

Oxford Scholar 2003

Degrees: Yale University: M.D. 2002; University of Pennsylvania: Master of Medical

Physics, 2001; Washington University: A.B., Biology, 1997

Research Interests: Physics, Diagnostic Radiology and Oncology



Hardave Kharbanda graduated *Summa Cum Laude* and valedictorian from the College of Arts & Sciences at Washington University in St. Louis, where he studied under the Arthur Holly Compton Fellowship. He went on to receive his Master of Medical Physics through a fellowship from the University of Pennsylvania Dept. of Radiology, and his M.D. from the Yale University School of Medicine. Dave has received multiple honors, including being named a Goldwater Scholar in Math and Science, a National Science Foundation Young Scholar, and a Presidential Scholar Finalist. He was also elected to Sigma Xi and Phi Beta Kappa, was one of two Missouri delegates appointed to the National Youth Science Camp, and was selected as Missouri's sole semifinalist in the Westinghouse Science Talent Search. Dave has had extensive participation in imaging research, including one of the first studies to analyze the impact of cardiac motion on Diffusion Tensor Magnetic Resonance Imaging (MRI) in the human spinal cord, which he presented at the Radiological Society of North America. By election to Omicron Delta Kappa, Dave has been honored for his outstanding leadership and community service activities, most notably the writing and production of a video documentary using both history and genetics to educate our still-impressionable youth about the senselessness of racism. He has also made time for several musical interests (piano, singing, dancing and violin), and furthermore enjoys tennis, swimming, and writing poetry. As an Oxford Scholar, Dave is developing a new concept for transmitting radio pulses in MRI with his mentors, Communications physicists David Edwards and Chris Stevens & MRI physicists Matthew Robson and Peter Bandettini. For his future career, Dave is passionate about combining his physics and medical backgrounds to "achieve innovations in early cancer detection through imaging, especially for cancers for which early detection provides virtually the only hope."

