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EDUCATION

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Harvard's #2 graduate balances brillance with art and atman

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You could have heard a pin drop. After all, the event was one of awe-inspiring pomp and circumstance in that blue-chip, Ivy League temple of higher learning--Harvard University. Manjul Bhargava stepped up to the microphone, clad underneath his graduation gown in his Indian kurta and pajama. As one of the top two students graduating in Harvard's 1,600-strong 1996 class, he had been invited to lead the commencement. Surrounded and undaunted by the trappings of mainstream America, he began with teachings from the Vedas. Manjul recalls, "I thought this would be the perfect beginning to this auspicious ceremony. I recited in Sanskrit some of my favorite verses, and a translation into English was read immediately afterwards and broadcast on radio throughout the Boston area."

Yes, you can take the boy out of India, but you certainly can't take India out of the boy! Confident and proud of his Hindu culture and identity, this young Ontario-born son of a chemist father and mathematician mother has proven that he is truly

Aryabhata's descendent in mind and spirit. This January he received the prestigious Frank and Brennie Morgan Prize for outstanding research in mathematics by an undergraduate student. Manjul, whose academic career has been flawless, received the award for the four papers he submitted to the Morgan Prize Committee. His Senior Honor's Thesis, "On P-orderings and polynomial functions on arbitrary subsets of Dedekind-type rings" unifies and generalizes the results of about 20 previous papers, many by well-known mathematicians.

This may all sound a bit cerebral to ordinary mortals like us, but in case you think that Manjul is one of those Super I.Q. brains with the social life of a nerd, think again! He was editor of the school magazine Ventures, played on the tennis and bowling teams and was in the Ecology and French Clubs. He attracted academic awards and scholarships throughout school and college as effortlessly as honeycombs draw bees. He cheerfully admits: "I never really liked going to school, and so I rarely attended. Instead, I spent most of my childhood biking, playing tennis and basketball with neighborhood kids, writing, flying kites, reading recreational math books, and learning to play the sitar, guitar, violin and the tabla."

Manjul, the winner of the First Annual New York State Science Talent Search, almost didn't graduate because of his carefree inclination to skip classes that couldn't teach him anything he didn't know already. After all, he had completed all his high school's math and computer courses by ninth grade! Still, he did manage to graduate--as the class valedictorian, no less.

At Harvard, he was awarded the Thomas Hoopes Prize for outstanding research work. While taking graduate courses, he also taught undergraduate mathematics as a teaching fellow for three years and was a three-time recipient of the Derek Bok Award for Excellence in Teaching. All this before he reached voting age!

Even at Harvard, Manjul found time to pursue Sanskrit, table tennis and the tabla, which he played at various musical performances in the Boston area. His extended Hindu family, with whom he spent many vacations in Jaipur, nurtured in him an overwhelming love of India. His grandfather, Dr. Purushottam Lal Bhargava, is a renowned scholar of Sanskrit and ancient Indian history, and was recently honored by the president of India for his groundbreaking research. His mother, Dr. Mira Bhargava, is a noted mathematician, but as Manjul observes, "She is also a wonderful and dedicated traditional Indian mother and homemaker."

Though Manjul grew up in several cities in Canada and the US, Hindu values were instilled in him as a child. He says: "My first language was Hindi, and I picked up most of my English later on from school and from friends. I took a leave of absence from school in the second half of my sophomore year and spent it in Jaipur with my grandparents. I learned Sanskrit at the Rajasthan Sanskrit Vidyapeeth and took further tabla lessons from my teacher there."

While he was growing up, discussions of the Vedas, the Puranas and the Mahabharata were as common as those on current news. All major Hindu holidays were celebrated with

puja, arati (offering of lights) and lots of festive food. His Hindu upbringing did not clash with growing up in America.

The family's staunch vegetarianism did cause some minor clashes in elementary school, but Manjul stood his ground: "Sometimes kids I ate with would make fun of me for not eating meat--'You've never had a hamburger in your life?' they'd ask incredulously. I would remind them that what they were eating were slices of dead cow and pig, and I'd relate cruel and gruesome stories of the slaughterhouse to them. This generally grossed them out enough to never make fun of vegetarianism again. In fact, afterwards many of them stopped eating meat altogether--at least in front of me!"

Manjul's commitment to vegetarianism persists, and at Harvard he was involved with the Animal Welfare Committee. The idea is to raise awareness of animal rights through such activities as fur protests and examining the humane treatment of laboratory animals. Recalls Manjul: "I was very surprised to be the only Hindu member on the committee. While it is gratifying to see so many non-Hindus becoming dedicated to the cause of ahimsa, I wish that more Hindus would get involved in promoting this noble Indian practice."

As a youth in North America, Manjul had one minor problem: the Hindu holidays almost never coincided with school holidays. He says, "I would miss many school days throughout the year for various Hindu festivals. But to tell you the truth, I always found sitting through classes all day rather dull and boring, and so was very happy on those days when I was able to skip school, all with a valid excuse, too!"

How does he feel about being raised half in the East and half in the West? Manjul observes, "I am so glad to have grown up in two cultures! It has allowed me to extract the best of two worlds. The wisdom and values of Hindus together with the confidence and work ethics of Americans has really been an inspiring combination. It has also allowed me to grow up as a truly multilingual person and to be exposed to many different schools of literature, music and art."

Because of his frequent trips to India and his exposure to Indian culture at home, he feels very much a part of the home country too. He thinks young Hindus growing up in 21st century US should hang on to their culture and religion. "People don't realize the tremendous advantage of growing up in two different cultures," he points out. "Hinduism is an especially adaptable, rational and universal way of life, and growing up in America does not in any way prevent one from holding on to our Sanatana Dharma."

Indeed, Manjul has taken bits and pieces from both cultures and created his own ideal universe. He wears kurta pajamas but also Western clothes; he is adept at computer science but also fascinated by Vedic ganita jyotisha, or astronomy. He says, "I've read the marvelous exposition of ganita jyotisha by Aryabhata (4th century) who is recognized worldwide as the founder of modern astronomy and trigonometry."

Living on American campuses and exposed to the hard-sell of television shows and commercials, how has the handsome bachelor dealt with dating? He points out that this is certainly an issue on which the Indian and American cultures differ,

adding that young Indians in America are under tremendous pressure by their peers to date. He says, "I personally have chosen not to date and have a large circle of close friends --male and female, mostly American--who have accepted and respected my decision. I attend social functions, not with a date, but with family members or friends."

As for marriage, Manjul protests: "I haven't thought much about marriage yet, so I can't say whether I will have an arranged marriage eventually--I'm only 22 and am in school for a couple more years!" He does add though that he would not insist on marrying from the same community but would certainly hope to marry someone who shares his Hindu values, speaks Hindi, enjoys Indian music and likes the natural sciences.

At Harvard, he graduated summa cum laude in math and was awarded the prestigious Hertz Fellowship which he is currently using to pursue a Ph.D. in mathematics at Princeton University. He eventually hopes to be a mathematician at a research institution: "I would really like to open some sort of chain of national math and science gurukulas (schools) in India. There is so much mathematical and science talent in India, but unfortunately, such talent is not fostered and attended to as it is in the United States."

Asked what helps him get through rough times, Manjul points to the ten cardinal virtues of Hinduism--the yamas and niyamas--as prescribed in the Manusmrti, including fortitude, forgiveness, truthfulness, absence of anger and pursuit of knowledge. To that he adds, "Growing up in a traditional Hindu

family also makes tough times much easier, as family members are always willing to sacrifice their own time and resources when others are in need. My mother especially has been the paramount example of sacrifice, having dedicated almost her entire life to the well-being of our extended family." And the omnipotent Ganesha sitting in the family shrine in New York extends a helping hand, too!