

# Neighbors

## Doors swing open for young research

UD grad attends recent gathering of Nobel laureates

By CAROL CHILD  
Special to The News Journal

When Rishi Khan and his younger brother Rakish were growing up, they liked to play video games in the cellar. But, because this was against their parents' rules, they built a burglar alarm - enabling them to have everything put away and be innocently watching TV when a parent came downstairs.

"It wasn't until three or four years later - when I was in college and my dad was fixing some door hinges - that he found out," says Rishi. "We had a whole system of wires running through the walls. They were hard to detect. We could tell which door was opening in what part of the house."

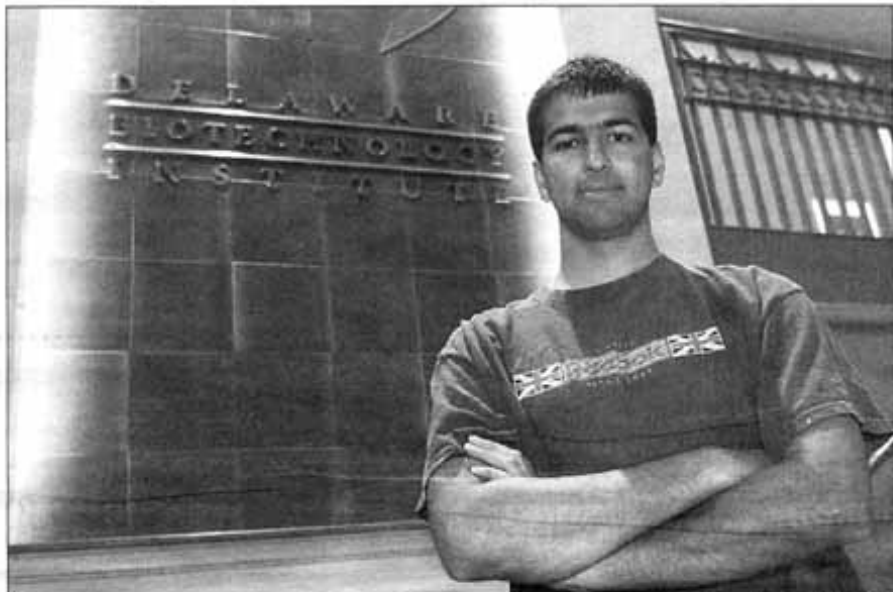
A door opened for Rishi Khan in Lindau, Germany, in August when he attended the 52nd meeting of Nobel laureates. Kahn, a University of Delaware graduate student with research interests in pathologies and bioinformatics, was selected as one of 39 American students and 200 young researchers worldwide to attend.

"It was really interesting, fun," says Khan, who calls himself an "American Indian." He is the son of Dr. Subhotosh Khan, who came to the United States from India in 1967 at age 18, and Eileen Viola Khan, a U.S. citizen born in Morgantown, W.Va.

"I was with people who have won in the past for chemistry," Khan says. "They were just normal people, not high and mighty."

Even before his dad brought him books and an electronics kit from Radio Shack, with pieces and springs to connect and a book explaining electrical circuit design, Khan began achieving scholastic honors as early as fourth grade, placing him in fast math programs and awarding him a scholarship to UD in seventh grade.

"The summer between eighth and ninth grades," Khan says, "I built a science project. It looked like a huge mess of wires on a 3-by-4-inch bread board. A Hewlett-Packard engineer was a



The News Journal/ROBERT CRAIG

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judge there and recognized what it was - a calculator that added. I won first prize."

Khan entered UD with 64 credits, earning a Bachelor of Science degree with honors in three years.

The 23-year-old, who gained fame in 1999 through being instrumental - with Richard Smith, president of Phar Lap Software of Cambridge, Mass. - in unlocking the complex secrets of the Melissa computer virus, is working toward his doctorate in the Department of Electronic and Computer Engineering as part of a new National Institutes of Health-sponsored program, jointly at the University of Delaware and Thomas Jefferson University.

Khan's UD adviser, Guang R. Gao, professor of electrical and computer engineering, recommended Khan for nomination to attend the Nobel laureates' meeting, sponsored by the U.S.

Department of Energy and the Oak Ridge Associated Universities.

Candidates for attendance are selected from among outstanding second- or third-year graduate students. But Khan might not have made it at all.

In January, with just the final paperwork to be completed, he was mugged in front of his home in Newark. One of the three muggers approached Khan, knocked him to the ground and hit him on his face with a gun, breaking and caving in the orbital bone below his eye.

Khan spent the night in the emergency room, then had reconstructive surgery.

"We thought he was going to lose his brain," says James Schwaber, Khan's adviser and director of the Daniel Baugh Institute for Functional Genomics and Computational Biology at Thomas Jefferson University.

Khan still has some facial nerve damage, but it is expected to heal in time. By this summer he had recovered sufficiently to travel to Washington, D.C., to join Nobel laureates for a tour and talks at the Department of Energy and a meeting with the German ambassador to the United States on what to expect in Germany.

Khan says he is thankful to Gao and UD for completing the paperwork so he could attend.

While Khan says he met some interesting people in Germany and had fun as a tourist, he found that, if he sought to win a Nobel prize, there are tradeoffs. He would have to focus solely on science and drop other things. Khan says he looks for a life of more balance.

"Rishi, a Delaware native, could have devoted his life to being a computer guy," Schwaber says. "Rishi is an example of an interesting new breed of student, coming out from computer science, that we call 'post-economic.' That is, their success in computer science has freed them from making decisions and choices solely on the basis of 'how can I make a living.'"

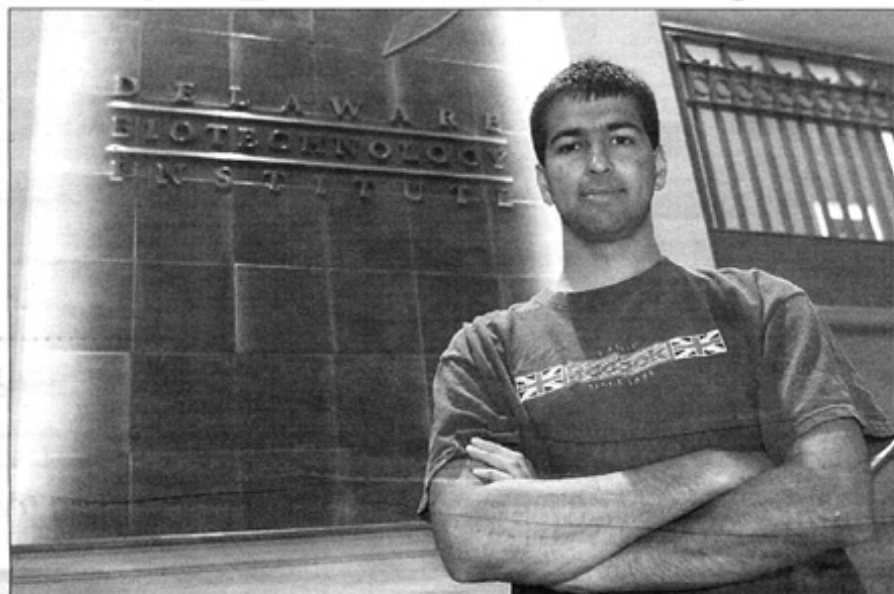
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## Swing open for young researcher



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### PROFILE

#### Rishi Khan

Age: 23.

Family: Engaged to Eileen Paschik; father, Dr. Subhotosh Khan, mother, Eileen Viola Khan; brothers Rakish, 20, and Ranjan, 14.

Residence: Newark

Education: University of Delaware graduate student and doctoral candidate. Earned a Bachelor of Science degree from the University of Delaware with honors, earning a 3.9 grade-point average. Alexis I. DuPont High School.

Distinctions: Selected to attend Nobel laureates meeting in Germany in August. While attending A.I., he was a member of the Widener University Fast Math program, earning college credits.

Business owner: Delaware Information Solutions Center, a computer consultant service creating custom programming, networks and security for businesses, with partner Leo Genyuk.

something particularly challenging.

"In order to pursue his goals, Rishi has taken the hard road, taking the full complement of biomedical courses here at Jefferson Medical College," Schwaber says, "and now [he] is in the laboratory doing molecular biology experiments in functional genomics and neuroscience. He is applying his experimental and computational work to understanding genetic regulation in brain function and neurological disease states."

Khan — who owns a business with his partner Leo Genyuk — expects to earn his doctorate in 2004 in computational biology. Then he plans to marry his fiancée, Eileen Paschik, a chemical engineer for a New Jersey chemical farm.

Khan credits his parents with giving him the most support and guidance over the years.

"People are made by themselves," says his father, a DuPont Co. senior research engineer. "He took his tasks. His mother and I showed him the way. He walked it."