In The Spotlight: Cell Biologist, Ulhas P. Naik, Ph.D.

November 2000 -- Translated into English, his first name means "happiness", and his last name is a type of "leader." Since joining the faculty of the Department of Biological Sciences two years ago, Dr. Ulhas P. Naik has received two major research grants and is involved in the development of a new method of teaching freshman Biology. Needless to say that with so much progress in such a small amount of time, he's been living up to his name.

Born and raised in India, Dr. Naik received his Ph.D. in Microbiology from the University of Bombay in 1988. He then moved to the United States to do his postdoctoral work at Cornell University Medical College, followed by the State University of New York Health Science Center at Brooklyn. While at SUNY-HSCB, Naik was presented with the Ella Fitzgerald Award from the American Heart Association (AHA) for his research in platelet function. This research later led to his discovery of the Junctional Adhesion Molecule 1 (JAM-1), an adhesive protein that provokes cells to stick together to form clots within blood vessels. In 1994, Naik accepted a position as Research Assistant Professor at the University of North Carolina at Chapel Hill. There, the AHA rewarded him again with the prestigious Young Investigator Prize in Thrombosis (a condition that causes clots to form inside blood vessels and can cause heart attacks, strokes, and arterial inflammation) when he identified CIB, a protein that aids in the creation of clots.

When Dr. Naik came to the University of Delaware in September of 1998, he found that the Department of Biological Sciences, under the leadership of Dr. Daniel Carson, was extremely helpful to him in settling into his roles as researcher and instructor. "It was a great thing when I came to Delaware," says Naik. "I was given a year not to worry about teaching so I could concentrate on making contacts with colleagues in the area, writing grants, setting up my lab, and conducting experiments." The extra time paid off, as he has recently been awarded with two major research grants from the National Institute of Health (NIH), totaling approximately $2.1 million. All together, Naik now has four different grants: one from AHA and three from NIH.

Currently, there are three different areas that Dr. Naik's research is focused on: CIB, and how it helps fibrinogen (a protein synthesized by the liver that is used in the blood clotting process) combine with receptors on blood platelets, thereby creating the possibility for a clot. Second, he is studying the mechanism involved in the spreading of cancer throughout the body. Finally, the third area looks at how JAM-1 molecules interact with each other to cause different cells to cling together.

Naik is also taking part in an experimental new way of teaching that is being developed by department colleague Dr. Steven Skopik. "I was asked if I was interested in teaching BISC 207 [Introductory Biology I]," says Naik, "and I said ‘yes’ if I could slowly be worked into it instead of doing it all at once." Currently, he shares this class with Skopik, each of them teaching the portions of the class that they are experts in. For the spring semester, he will share a graduate-level course with fellow Biological Sciences faculty members Dr. Norman Karin and Dr. Mary C. Farach-Carson using this same approach. Students benefit from this method because they hear first hand from...
the scientists who perform research in the area that is being taught. "I really enjoy this style of teaching: it doesn't take away too much time from my research, and at the same time it gives me the experience I need so that I can eventually teach the whole course."

Success at work, however, is not the only positive aspect in Dr. Naik's life. He takes great pride in his family: his wife, Meghna, and his sons, Tejal (age 11) and Kushal (age 8). The entire family spends a lot of time together in the lab; Naik says that Tejal is thinking about becoming a surgeon, and Kushal is an aspiring scientist. They are very active in sports: both participate in the UD Blue Fish, a university-sponsored swim team, and are avid soccer players. Naik himself enjoys many different sports, including cricket, golf, tennis, and biking. When asked which he was best at, he laughed and replied, "I'm a jack of all trades and a master of none."

Looking towards the future, Dr. Naik has established the makings of a long and fruitful career at the University of Delaware. "I like the university, the department, my colleagues. I can do good research, get funding, and collaborate with other departments." In listening to him speak about his experiences at UD, it quickly becomes apparent that he is very content with his current position and the prospects for the road ahead. "I plan to get tenure, teach biology, and do research," Naik states about his future. They are all of the necessary components that will allow him to keep living up to his name for a long, long time.

Naik Lab Group. Back row (left to right): Courtney Berkholtz (Undergraduate Student), Nick Perchiniak (Undergraduate Student), Chad Blamey (Graduate Student), Chris Quarshie (Undergraduate Student). Middle row: Freddie Pruitt (Undergraduate Student), Julia Velasquez (Undergraduate Student), Dr. Ulhas Naik, Shivam Patel (Undergraduate Student), Melissa Krupski (Undergraduate Student). Front row: Yuhan He (Graduate Student), Meghna Naik (Research Associate III), Kristin Eckfeld (Research Assistant), Stacy Harrington (Graduate Student)