

Rob Strong



PROBABILITIES

A RANDOM EVENT CHANGED SYED RAKIN AHMED'S LIFE.

The Phi Beta Kappa, Tau Beta Pi, and High Honors graduate of Dartmouth College, now a second-year Geisel MD-PhD student, had not considered life as a physician; he was committed to a career in medical research. Pursuing a degree in biomedical engineering, with a double minor in applied mathematics and economics, Ahmed was interested in radiation oncology from a scientific, rather than a clinical perspective. Focusing on biomedical optics, he collaborated with both Thayer School of Engineering and Geisel faculty—spending significant time in Dartmouth-Hitchcock's radiation oncology department. His work resulted in publication of a lead-author paper in the *Journal of Biomedical Optics*.

During his sophomore summer, a bicycle accident hospitalized him for nearly one month—it was the first time he'd been hospitalized for that length of time and it was life-changing. “I had major jaw surgery then dental work, and it gave me a different perspective of medicine—I saw the human side of healthcare. My conversations with nurses and physicians about the role of probability in both the accident and the recovery process had a lasting effect,” he says.

These conversations coalesced with memories from his youth in Bangladesh, where he witnessed the role of probability in daily life. It fueled his desire to pursue medicine. “Every morning as I walked to school, I saw rows of impoverished people suffering from a variety of illnesses—they were individuals without homes, shunned by society because of arbitrary social or economic standards—all denied healthcare because of their status,” he recalls.

Ahmed knows that life can change in an instant and he is grateful to be in the position he's in today. “I grew up in a low-income family but was able to attend an English-speaking school, and subsequently, Dartmouth, on full scholarship. Many things had to work together in just the right way to get me here—in all probability, one tiny change and I'd be someone else in an entirely different situation,” he says. “As a medical student, I think it is important to recognize the value of

these nuanced experiences.”

His propensity to see multiple sides of a situation, which he honed through years of international debating, gives him a valuable perspective when conversing with patients or people he meets—conversations he treasures whether they take place in a clinic or in a more serendipitous way. This open-mindedness fosters his empathic concern for others by connecting to their emotional experience without judgement, an aspect which has also helped in his role as a live-in advisor for undergraduates.

“Neither easily defined nor practiced, the ability to imagine other perspectives and communicate that understanding is essential as I plan my career in medicine and research,” he says. “It is also an essential element in truly delivering collaborative care.”

Through his involvement with Dartmouth's Tucker Center for Spiritual and Ethical Life, he led a trip to Washington, D.C. to explore the intersection of faith, race, and social justice. “Further understanding of the spiritual and socioeconomic component of healthcare is something I gained from that experience—it clearly relates to my work at Geisel as an Urban Health Scholar,” he says. Urban Health Scholars prepare medical students interested in providing care to medically underserved populations in urban areas. He had previously explored the nuances and economics of urban health during his time as a

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student at the University of Oxford.

As a future physician-scientist, Ahmed anticipates his research will result in a better understanding of the unknowns and limitations of cancer—a complex group of diseases with many possible etiologies—improving how physicians communicate with patients regarding specific treatment protocols. He explored this avenue further through a competitive fellowship at Memorial Sloan Kettering Cancer Center during his first-year summer at Geisel.

Beginning this July, Ahmed will spend the next four years honing his research skills at Harvard Medical School earning a PhD in biophysics. While there, he will conduct research alongside faculty at Harvard, Massachusetts Institute of Technology, and Boston-area hospitals. He plans to focus on cancer genomics and CRISPR—a technique that allows scientists to make precision edits to any DNA—with an interest in gene therapeutics and advancing better therapy in cancer genetics. He'll then return to Geisel to complete his MD.

“This has been a unique experience so far,” Ahmed says. “Where I'll end up is difficult to predict.”

As he well knows, anything can happen.

SUSAN GREEN