

Medicine and Engineering: A Path to Change



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When Samir Raza (BESc/MD’10) began his studies at The University of Western Ontario as a National Scholar in 2003, he planned on using his engineering skills in the field of medical research. But his academic interests changed, and he soon discovered a desire to pursue a career in medicine.

A transfer to the Integrated Engineering and Medicine degree program (BESc/MD) in the Schulich School of Medicine & Dentistry made perfect sense.

“In the combined program, you get a great deal of personal attention and support,” says Raza, who is now a first-year resident in internal medicine at Schulich. “That made the seven-year whirlwind journey easier, more enjoyable and less stressful.”

As he progressed through the program, Raza’s aspirations shifted from using his engineering skills to solve technical medical problems, to using his knowledge of engineering and medicine to solve global health and development challenges.

The catalyst for that shift was his involvement in Western’s chapter of Engineers Without Borders (EWB). The organization’s mission to promote human development in impoverished communities energized Raza, and he became president of the group during his first year of medical school.

“As EWB president, I really developed as a leader and as a public speaker,” says Raza, who helped raise more than \$40,000 for overseas projects. “And I discovered my passion, which is international development.”

Today, he remains highly involved with EWB, both at Western and at the national level – currently as a coordinator of the organization’s ‘Member Learning Program,’ which strives to expand its members’ knowledge of international development and leadership skills.

During his residency, Raza has also developed a keen interest in health systems and policy, as well as teaching. He hopes those interests, combined with his passion for international development and global health, will form the foundation of his career.

“I’m using this year as an exploratory phase to learn how I can best contribute in these areas,” says Raza. “In doing so, I hope it will equip me to have a more meaningful and significant impact in the future.”

In the meantime, he’s simply busy with the day-to-day life of a resident. “I’m having a great time, and I’m really enjoying the program,” he says. “I’m constantly learning, and I get to work with fantastic colleagues.”

Raza says there’s no question his studies at Western have helped shape him – both personally and professionally. “Western had a profound impact on my career choice and the individual I have become.” The program, he adds, “taught me the importance of innovation, effective problem-solving, sharing knowledge and giving back to my community.”