

It was just after lunch at the clinic in Indonesia when four ten-year-old boys challenged me to a game of soccer. I knew the boys from my work at the clinic and, despite the four-against-one odds, I felt that my size and age gave me a favorable advantage. One of these boys was Tison, who suffered a severe burn from a kerosene lamp explosion two years before my arrival at the clinic. This burn left him with disfigurements of his legs and his right hand, which significantly impacted his physical ability. Throughout the course of our soccer game, I began interacting more with Tison. Despite the language barrier, we started to forge a deep friendship. Over the next few weeks, Tison and I began spending more regular time together to the point where we were inseparable during the entirety of each day while I was working at the clinic. Although I don't remember the outcome of that first game, four years later I remember this particular game as my first encounter with my new friend. In fact, befriending Tison led to one of the most defining experiences of my life as it provided me with the concrete motivation and desire to become a physician.

Tison's burn injuries severely limited his physical activity and quality of life as a ten-year-old. The scar tissue from his burns left his dominant hand dysfunctional and caused structural changes in his legs that forced him to walk and run with a severe hobble. After getting to know Tison, I became an advocate and catalyst to find the means to bring him to the United States where he could undergo reconstructive plastic surgery to help restore functionality from his burn injuries. Tison's charisma captivated me as well as the nurses, and together we worked hard to find ways to fund his travel and surgery. Upon our return to Fairbanks, we began the hard work of convincing the local hospital and plastic surgeon to volunteer their services to provide care for Tison. I even convinced my mother to have Tison become my new 'little brother'. After almost five months of networking and tedious paperwork, Tison travelled to Fairbanks for his surgeries and began living with my family. During his year and a half stay in our home, Tison quickly became a regular member of the family. While he was in Fairbanks, Tison underwent nine surgeries that addressed the major issues with his legs, feet and hand. He is now much more capable of walking and running and has improved functionality with his disfigured hand, and is one step closer to being the soccer star he has always dreamed of becoming.

Ever since I was in middle school I have wanted to become a doctor, but I could never articulate a reason other than that my father works in health care. When I was able to take part in providing Tison with these surgeries, and witnessing how these surgeries provided life-changing effects in a young boy's life, I had finally found the true reason for why I wanted to become a doctor. In addition to pushing me towards medicine, the experience with Tison has provided me with a better appreciation for cultural differences and helped to improve my communication skills and patience as I assumed the role of an 'older sibling' for the first time. I believe that the knowledge and skills gained from this experience will improve the quality of the care I hope to provide in the future.

Working in a resource limited and medically underserved region in Indonesia inspired me to seek out opportunities to participate in global health-based bioengineering research as an undergraduate. In particular, I wanted to be involved in developing low cost technologies that would have a profound impact on the health outcomes of developing regions in the United States and world. The region of Indonesia where I worked was on the verge of an HIV outbreak, and while I was there I personally helped care for a woman who later died from the complications of AIDS. Her death inspired me to join a research lab as an undergraduate that would enable me to help develop new technologies for the prevention of HIV infections in women. I am currently working on the development of polymer nanofibers as a novel drug delivery platform to vaginally deliver anti-HIV agents to prevent sexual transmission of HIV. As I continue to work on this project throughout the next year for my senior bioengineering capstone project, I am driven to help produce a technology that one day may be used to prevent and possibly eliminate the devastating effects that I have seen HIV have on a patient and her family.

My experiences working in health care in Indonesia, meeting Tison, and conducting HIV prevention research have motivated me and further confirmed my desire to pursue a career in medicine. I am continuing to pursue other activities that define my interest in medicine, particularly global health and rural medicine. After being a major influence for providing Tison with these transformative surgeries, I have realized that medicine is one of the most direct and hands-on ways in which a person can transform and improve another's life. Becoming a doctor would provide me with skills necessary to have a substantial impact in the improvement of a person's quality of life. The dream of providing this impact is what drives me to pursue the practice of medicine.