Leadership
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SN: How did you get to where you are now in your career?
ERIKA CAMACHO: I grew up in East Los Angeles, California, and thought that my surroundings were the norm in the U.S. Having inspiring mentors, such as Jaime Escalante (from the movie Stand and Deliver), helped me expand my horizons and realize that I could do much more than just finish high school.

I knew from the time I left home that I wanted to do something to help correct the extremely unfair social and economic inequities that many of us experience on a daily basis. I knew that one way of giving back was to empower disadvantaged populations by helping them attain an education. However, it wasn’t until I attended the Mathematical and Theoretical Biology Institute (MTBI) that I experienced firsthand a way to do this.

MTBI empowers individuals through a combination of great mentoring and an intensive, collaborative environment where a student can reach his or her full potential. The tireless dedication of its co-founders, Drs. Carlos Castillo-Chavez and Herbert Medina, inspired me to follow in their footsteps. Helping students in their careers—by providing a solid mentoring experience and research opportunity—is what I have set out to do with AMSSI.

SN: You co-founded the Applied Mathematical Sciences Summer Institute (AMSSI). What is that program’s purpose?
EC: Less than 4 percent of the Ph.D.s in mathematics awarded over the last 15 years have gone to underrepresented minorities. One of the main reasons is that the traditional definition of someone who has “Ph.D. potential” fails to take into account the struggles that many underrepresented groups continue to endure. Many of the underrepresented students that make it into graduate school find themselves in a foreign environment and without the support network needed to succeed.

AMSSI gives students an intensive research experience: a taste of the workload encountered in graduate school in the mathematical sciences, but within a fully supportive environment. We expose them to both academic and industry leaders who, together with their fellow AMSSI students, provide a network of support from which they can draw for many years.

SN: How have you developed as a leader?
EC: In high school and college, I realized that so many people (classmates, teachers, civic leaders, etc.) did things just for the glory of the situation without always taking the greater good of the people into account. Growing up with so many people in my community suffering made me keenly aware of the need to do something to impact my community. I had key mentors, leaders in my community, and they gave me the opportunity to work closely with them. This allowed me to learn many different aspects and styles of leadership. Their passion and desire to help others definitely was transmitted to me. Through trying to make a difference, I took on more and more leadership positions and, thus, developed these skills.

SN: How have such skills contributed to your career?
EC: [Leadership] skills have assisted me in being able to recognize the strengths and needs of those around me. Understanding those with whom I am working allows me to help bring them together and create a sense of community. Within this community, individuals are far more transparent and willing to share their views. I feel it is essential that those involved feel a sense of ownership of whatever project we’re working on. In this type of environment, all individuals involved thrive and feel fully connected to the objectives and the process. Incorporating the feelings and opinions of individuals that my decisions affect and using this to shape any action is probably the most significant skill.

SN: What are your future career goals?
EC: While I see myself continuing with AMSSI for a number of years and hopefully continuing to increase the number of underrepresented students pursuing higher degrees, I ultimately see myself working in the area of public policy. There are too many people out there who will never even have the opportunity to pursue an education because of financial hardships. It is sad to see so many young people with so much untapped potential, and our current system continuing to fail them. I want to change this inherent unfairness in the system.

“It is a social injustice to just continue with the status quo while so many people struggle to make ends meet.”
—Erika T. Camacho