

I hail from a middle-class family of a beautiful Himalayan country of Nepal. I have one sibling including my mother. I was raised solely by my mother after the death of my father when I was four years old. Bravely my mother then with two children, in a patriarchal and highly conservative society, strived and sacrificed her every day to ensure that I didn't fall behind anyone. My mother would always say, "make three things priority in life: family, education and moral values, and the rest will eventually fall in place". As much my mother had wanted for me, I made an audacious decision to come to the US at the age of 19 to pursue my undergraduate studies and I got admitted to University of the District of Columbia (UDC) in 2005. However, expensive tuition and accommodation was not going to make life easy because student loan was not an option for an international student and I was allowed to work only on-campus for limited hours despite the fact that I had to pay all of my expenses including non-resident tuition fees. More importantly, I had to get used to a different education system and get accustomed to the new culture which was in contrast to the society and culture that I grew up in. I struggled, and at times nearly succumbed to the tribulations and even thought of going back to Nepal. However, I strived with all the courage, hard work and determination taking myself one step further towards achieving my life's goal.

My perseverance paid off when I was selected for Merck-AAAS fellowship to conduct a research under the guidance of Dr. Deepak Kumar at UDC to characterize the molecular mechanisms involved in apoptosis induced by novel organotin compounds in breast cancer cells. I also learned to perform cell and molecular biological experiments to identify molecular targets and elucidate their roles in apoptosis. I gracefully graduated with BS degree in Biology from UDC, one of the historically black universities, in 2009.

After finishing my undergraduate degree, I joined graduate program at SDSU in August, 2011 and started immediately a research project on soybean genomics. In that project, I was involved in genome-wide identification of mitogen-activated protein kinase (MAPK) gene family in soybean along with the characterization of MAPK genes that are involved in root nodulation. I also learned to use different methods in bioinformatics and also honed my skills working in a molecular biology. During my Master research program, I taught several undergraduate level courses as a teaching assistant and also trained many undergraduate research interns from under-represented native communities, particularly Lakota communities and schools in South Dakota for bioinformatics and molecular research.

After finishing my Master degree from South Dakota, I later got an opportunity to work in Australia at the University of Queensland-Translational Research Institute (TRI), which is the third largest genotyping center behind the Broad and Sanger institutes. I made this decision purely based on my interest to work on human genomes and genotyped SNP data. I thought this would be a great opportunity for me to develop an international pedigree as a scientist by gaining experience with Australian education/research system and also learning highly technical skills required to handle human genomes/exomes and genotyped SNPs data.

The research experience I had in both the US and Australian Universities has instilled in me the level of devotion and care needed when dealing with biological data that would impact human health and economic and social well-being of people at large. More importantly, working with people of diverse background, culture, ethnicity has always helped me grow as a better human being. As a student from a third world country who has been fortunate enough to study in the US, I have always wished to contribute back to the under-represented community and society, especially in which I grew up. With a PhD in bioinformatics and extensive research experience, I would be able to serve my long-term goal to establish a genome research institute

in Nepal and help support medical research, build strong research culture and produce new generation of scientists in the country. Moreover, my unflinching interest, my experiences and the sacrifices my mother and I have made, I hope, will make me a successful person. If endowed with opportunity, I would work with utmost diligence, hard work and unwavering commitment to make my most determined goal come true. It would not be just an opportunity, but your trust upon me as a sincere, committed and deliverable student would be a great obligation to me which I will fulfill devoutly and religiously.

Sincerely,

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