

Personal Statement

My parents have always been concerned that all eight of their children would have the educational opportunities they did not have. My father was unable to attend high school as he was obligated to work in order to help support his family since he was nine years old. Although he could not afford to pay for our university tuition, my father relentlessly encouraged my siblings and me to pursue a college education, even if we were to fund it by our own means. Thus, as part of the first generation in my family to attend college, I have moved far away from home to pursue my dream: a career in science. I was born and raised in Bogota, Colombia, where most of my family still resides. With much sacrifice, my parents decided to send me to the United States immediately after high school. I arrived in the United States at age 16, and for almost 11 years I worked to support myself while attending college part time until I graduated *cum laude* with a major in Biochemistry and a minor in Economics. Because I paid for my own college education, I always made an effort to maximize my learning experience, maintain a solid academic record and engage in scientific research. While at times, financial necessities had a negative impact on my academic performance and delayed the start of my scientific career, these experiences and the struggles to overcome them allowed me to not only learn how to manage my time efficiently, but also allowed me to develop a resilient character to become a dedicated researcher and role model for students of underrepresented backgrounds who also struggle to achieve their dreams of becoming scientists. With an earnest attitude and an unlimited drive to succeed, I recently started my doctorate degree at Harvard University, where I will not only pursue my interest in answering scientific questions involving structural and functional studies of macromolecules, but I will also work towards closing the educational gap of minorities and underprivileged children by being a teacher, a mentor, a role model, and advocate for institutional change.

Thanks to the support of federally funded programs such as the Minority Research Access Careers (MARC), the Minority Biomedical Research Support (MBRS) and the Research Initiative for Scientific Enhancement (RISE), I was able to merge my motivation and work ethics, with the guidance necessary to cultivate my learning and grow as a research scientist. At the end of my undergraduate studies, I had 3 years of experience in scientific research at Hunter's Chemistry department, plus summer internships at Harvard and Yale University, one of which led to third authorship publication. In addition, I developed a keen interest to participating in national and local scientific conferences. Thus far, I have presented my research and won awards at the Annual Biomedical Research Conference for Minority Students (ABRCMS), Society for Advancement for Chicanos, Native Americans and Hispanics (SACNAS) Annual Conference, several City University of New York (CUNY) conferences, and the National Experimental Biology Conference. Being part of the largest national conferences for minority scientists has been very inspirational, and it has afforded me opportunities to network with other scientists of underrepresented groups, some of which have become my mentors and others that will become my future colleagues. Through these conferences, I have participated in workshops and activities that have placed diversity as a priority in my scientific career.

As an undergraduate, I took a local approach to my mentoring aspirations by starting an Undergraduate Affiliate Network (UAN) of the American Society of Biochemistry and Molecular Biology at Hunter College in order to begin outreach activities to motivate and mentor high school students from underprivileged areas. The main goal of our outreaching activities was to show future generations, especially minorities interested in science, that beyond the everyday life struggles they can pursue careers in various fields of science, math and engineering. As a graduate student, I have been invited to give a presentation to MARC and MBRS students at Hunter College, where I will not only recruit students from underrepresented groups for Harvard's Molecular, Cell and Organisms Summer Internship, but I will also become an alumina-mentor for students who will become future scientist that will also submit NSF proposals like this one. In addition, this past October I returned to the SACNAS Conference, but this time as a recruiter for the Molecular, Cell and Organism graduate program at Harvard University. I must admit that the transition from being a conference attendee that wondered through the tables of the exhibit hall searching for advice while attempting to find the graduate program that matched my interest, to being on the other side of the exhibit tables advising and interacting with minority students who are undergoing the same struggles as I once did, has been one of the most rewarding activities in my life. I am grateful for having the opportunity to give back to the minority scientific community, and I will continue being part of SACNAS and ABRCMS not only to present and disseminate my research, but also as a recruiter, a mentor and a role model.

Up to now, my career goals are continue working towards my doctorate and post-doctorate degree in hope that one day I will become a faculty member in an institution that serves underrepresented groups, so I can continue contributing to research and mentoring future generations of minority scientists. I am certain that being awarded with an NSF fellowship will not only allow me to further pursue my research proposal, but it will also allow me to expand my participation to other national conferences and meetings, at the same time, that it will allow me to engage in activities and workshops that will strengthen my leadership and mentoring skills.