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Clinical Research Training Program Fellow 2003-2004

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My name is Cesar Castro and I participated in the Clinical Research Training Program (CRTP) in 2003-2004. I am from New York City, New York. I attended the University of California-Berkeley, where I earned a B.A. in Psychology. I also, earned a M.S. in Health and Medical Sciences from the University of California-Berkeley School of Public Health. I graduated from the University of California, San Francisco School of Medicine in May 2005. I am currently an intern in internal medicine at the University of California, San Francisco Medical Center.

I first became aware of the CRTP by perusing the National Institutes of Health (NIH) Training website and decided this would be the perfect opportunity for me to return to the NIH and continue my research in oncology. True to the spirit of the NIH Roadmap, my CRTP research project comprised of a highly multidisciplinary collaboration across various scientific fields. The premise involved molecular targeting via a novel nanoparticle, of the $\alpha v\beta 3$ integrin, that is over-expressed in tumor-associated angiogenic vasculature. The hope is to non-invasively monitor angiogenic response to cancer therapies, improve a priori patient selection and hence power of clinical trials, and improve local release of therapeutics without the systemic effects associated with our current chemo regimens.

I initiated my interest in oncology research as a Pre- IRTA Fellow at the NIH prior to attending medical school. While our current drug armamentarium generally involves untoward toxicities, the field of oncology is a promising one to enter as rational drug therapeutics, molecular imaging, and nanotechnologies begin to mature and display efficacy. The NIH Clinical Center is a well-known repository of forward thinking scientists seeking to advance their respective fields. I wanted to return to the NIH to re-engage in the process of researching technologies that have not yet trickled down to the rest of academia or pharmacia.

A typical day at the NIH involved research meetings with my mentors in the morning, which were followed by experiments. Afternoons involved Grand Rounds or patient rounds followed by more experiments. Didactic sessions and journal clubs were interspersed throughout the week. Video conferencing with our out-of-state collaborators were also not infrequent.

My experiences as a CRTP Fellow at the NIH only reinforced that clinical research and trial design will be continuing pursuits of mine as I continue to shape my career aspirations. Following my Internal Medicine residency at the University of California – San Francisco Medical Center, I expect to pursue a hematology/oncology fellowship. My goals include cancer-related clinical research and trial design particularly with novel therapeutics. Additionally, having been a repeat customer at the NIH, returning here would be within the realm of possibility. I have been enriched both academically and personally during my time here. I expect to receive multiple returns on my professional investment if I have the privilege to train or work here again.

As a CRTP fellow, my mentors were invaluable and defined my experiences. In addition to their scientific acumen, they are personable and student-friendly individuals. The climate they created was one of inclusion and collaboration. They were professional colleagues and just as importantly friends as well. I will always maintain an active outlook of my area of inquiry and keep asking questions and seek to contribute in creative ways. I will also be confident when discussing my areas of expertise and be honest about my limitations. A mentor-mentee relationship is a dynamic one where each party learns from each other.

I believe the most impressive aspect about the NIH were the resources and a stellar cadre of scientists, both domestic and international, with a like-minded vision—to advance our knowledge about infirmity and develop therapies through innovative ways.

In addition to spending countless hours on my research project, I try to find time to enjoy basketball, soccer, theater, and a continuing mission to find New York quality pizza here in California!