



Education at URMIC – Student Perspectives



Name: Alicia Augustine

Hometown: Doylestown, PA

Undergraduate Degree: B.S. in Biology from Delaware Valley College

Graduate Degree: Ph.D. in Pathology from University of Rochester

Areas of Interest: mechanisms of obesity-associated cardiovascular disease; the association between environmental factors (obesity, tobacco smoke exposure) and development of markers for metabolic syndrome and cardiovascular disease in children

Background Information

I grew up in a family of five in Bucks County, PA, which is located about 1 hour north of Philadelphia. My mother is a freelance medical writer/editor and my father is a system architect in the semiconductor field. My two younger sisters are pre-doctoral candidates at the University at Buffalo. As a child/young adult, I participated in gymnastics and dance, played travel soccer and high school volleyball. I was (and still am) very close with my family and have been fortunate to travel with them quite a bit. I graduated from Central Bucks High School East and went on to obtain a B.S. in Biology at Delaware Valley College. My pre-doctoral thesis work focused on mechanisms of obesity and insulin resistance, and was mentored by Dr. Robert Mooney in the Department of Pathology and Laboratory Medicine here at the University of Rochester Medical Center. Currently, I am a postdoctoral fellow in Preventive Cardiology under the mentorship of Dr. Thomas Pearson, as well as a Master's student in Clinical Investigation. Last year, I married a wonderful man and my best friend, who is a systems engineer for PAETEC Communications.

Why did you choose The University of Rochester Medical Center?

I initially chose the University of Rochester Medical Center for my pre-doctoral work because of the faculty's strong commitment to education, training, and success of its students. I also felt a tremendous sense of community and collegiality that was absent at some of the other institutions where I had interviewed. I stayed for my postdoctoral fellowship because of the expanding avenues in translational research and the opportunity for a basic scientist to obtain education and training in clinical research.

Tell us about your program

I am a postdoctoral fellow in Preventive Cardiology under the mentorship of Dr. Thomas Pearson. There are two components to my training: research and education. Although I am trained as a basic scientist, my current project is more aligned with clinical research. Under the experienced guidance of Dr. Stephen R. Cook in the Department of Pediatrics, I am examining the association between environmental factors (like tobacco smoke and obesity) and the presence of cardiovascular disease biomarkers in children. The educational component of my program involves completing the Master's program in Clinical Investigation through the Department of Community and Preventive Medicine (located in the newly constructed Saunder's Research building). This program provides excellent fundamental knowledge of the design and execution of clinical research. In true URMCM fashion, the program faculty are knowledgeable and experienced, as well as dedicated to the success of their students.

What are your career aspirations?

I am pursuing what has been deemed an "alternative career" path for a PhD. I have diversified my training in order to become a translational scientist who can speak the languages of both basic and clinical research. I enjoy thinking critically about science, trouble-shooting, making processes more efficient, and working with others to tackle big questions. Given my background and interests, I plan to become involved in guiding and directing basic or clinical research programs within academia, industry, or the government.

What are some of the things you have learned since you came to Rochester?

In a formal setting, I've learned how to ask the appropriate scientific questions, design and analyze research projects, and relate my project of interest to the "big picture" of human health. Informally, I've learned the true value of networking with peers and advisors. I know that others could echo my sentiments when I say that I am only in my current position as a result of supportive mentors and connections I've made throughout my training.

Any advice for prospective students?

Get involved! This could be through professional or social organizations, of which there are many at the URMC. Most people/organizations will readily welcome an interested and motivated volunteer. It's important to recognize that while your formal program is valuable and requires hard work, invaluable job skills are developed through the informal education and training that takes place when you step out of your comfort zone, diversify your experiences, and work as part of a team.