



Sean Carney

B.S. in Biology

Graduate: May 2011

Internship with the Thomas Jefferson College of Graduate Studies

Why did you choose to do this experience?

I wanted to become engaged in active research within the scientific community and the internship at Thomas Jefferson University was a very valuable experience. Also, I was able to receive course credit and a stipend for my work.

What are the benefits of doing this experience?

Working closely with scientific researchers was an experience I had not had before. I was learning about their projects, the significance of the results, and the techniques they used to obtain results. I increased my understanding of how science works on a large scale. Also, I worked with several graduate students during my time at Jefferson. They were very helpful in giving advice and answering questions about graduate school and furthering my education. Aside from working in the lab, this past summer was also my first time living in the city. Jefferson provided housing in downtown Philadelphia for all interns, which was a new and exciting adventure for me.

Describe any exciting project or responsibility you've worked on during your experience?

During my 10 weeks working in the lab of Dr. John Pascal, I was exposed to many new scientific techniques. Much of his lab's work is based on X-Ray Crystallography. Most institutions do not have the equipment to use this technique on-site, however Jefferson has an X-Ray Crystallography facility. I was able to learn about this equipment and with the guidance of co-workers, and used it during our experiments. Also, I was responsible for creating, purifying, and analyzing mutants of the PARP-1 protein, the major protein of study in Dr. Pascal's lab. This was a very exciting responsibility to have, knowing that what I was doing was completely new, and that further tests would be based off of my results. Dr. Pascal and his team were very helpful in teaching me all about the protein we studied and the techniques we used.

What advice would you give to other students who may be considering a similar experience?

I learned so much during my 10 weeks working at Jefferson, and I was exposed to many new things that I wouldn't have experienced otherwise. I would definitely recommend students apply for an internship. An internship provides valuable hands-on experience as well as insight that cannot be obtained in the classroom.