Provide an overview of the organization/research project and a summary of your responsibilities, tasks, and/or projects.

The research project that myself and lab partner Drew were a part of this past summer looked to analyze and identify the correlation of HDAC3 with leukemia. Much of our work this summer was involved in preparing plasmids, which included a number of steps involving DNA isolation, polymerase chain reactions, primer design, numerous gel electrophoresis and other protocols. Our hope this summer was to conduct a Luciferase Assay, which we were able to do towards the end.

During your internship, what did you accomplish or how did you make a difference? In what ways did you grow in your professional and technical skills?

I am very excited to continue the research into the school year and continue to make progress. Considering this was my first experience in a lab setting, this summer was an excellent opportunity to learn how to operate in a lab and to learn how to do fundamental lab techniques, such as PCR, cell culture, growing bacterial colonies, modifying the PH of a solution and gel electrophoresis. Additionally, it became apparent, as the summer progressed, the importance of thorough note taking, something I will continue to apply not only in research, but in other aspects of academia. Considering I have plans to apply to medical school, spending time in a lab setting not only is an educational experience for the MCAT, but also provides a solid base for a career which utilizes many of the traits that are required for success in the lab; traits like diligence, determination and patience.

Describe a problem that you helped to solve at your internship. What skills or knowledge from your education at Sewanee helped you address the problem?
During the research this past summer I read a number of scientific articles about what we were doing, essentially the background information of our protocols and overall lab objective. A particular problem that my lab partner and me ran into, was designing our primers. Having knowledge of molecular biology from a class that I took at Sewanee was very useful in the process of designing the primer. Furthermore, since the research was conducted at Sewanee, the skills and knowledge I learned this past summer are a direct result of the University's willingness to support students in their research assistantships.

In what way were your teamwork skills strengthened?

I was fortunate to work with my lab partner, Drew, who was nothing but helpful and a blessing to work with. It was great not only to have someone else to work with, but also be able to divide the work needed to be done, in order to be more time efficient. Specifically, something that needed to be done rather regularly was cell culture, which is a task that requires one person. We decided that it would be best to rotate this task so that when it came time to feed/split the cells (every two days), we would share the work equally. There are other examples, which include how to share notes efficiently, how best to approach a protocol as a team and how to communicate questions or answer questions in a constructive way.

How did your internship affect your career plans?

It gave me an idea of whether I would like to pursue a career in the lab. Although I am passionate about the goal of my research, I am still determined to pursue an M.D. and this summer is a great way to show schools that I am an active student during my summer breaks. As well, working with Dr. Summers was a wonderful learning experience and I look forward to continue working with her.

In what ways did your internship cause you to encounter people of different backgrounds from your own? What steps did you take to communicate effectively with such persons? What did you learn from such persons' perspectives?

Outside of my lab there were areas shared by other student researchers and professors. There were times when I needed to ask to borrow something or ask them where an item was and knowing the proper terminology for objects in the lab was vital to communicate successfully. In order to remember terminology I tried to use it with my lab partner as much as possible and also to say the names by myself in order to further reinforce it. It was a tremendous help having other researchers around, albeit they were working on different projects, because they could provide insight into questions I had, especially in the first few weeks.

Words of advice for future interns (housing, transportation, etc.)?

Make sure you buy food regularly. There were times when all I could think about was food! Try and schedule a day every week or two weeks when you go to the store either by yourself if you have a car or find someone who also needs to go shopping.

Words of thanks to your internship funding donors:

Thank you so much for providing the stipend that made this summer possible. I will continue to work hard both in class and outside of the University and hopefully make the school proud.