Summer Internship Report 2017

Rachel Vincent, C’18
Hometown: Laguna Niguel, California

Children's Hospital of Orange County
Orange, California

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

I performed scientific research within the fields of genomic/personalized medicine regenerative medicine, stem cells, nanomedicine, robotics/robotic surgery, artificial intelligence/big data, medical devices, mobile technology, and innovations in health care delivery. My specific research focused on how wearable technology and artificial intelligence can improve the field of medicine and patient life. I also participated in weekly clinical rotations to shadow physicians in the hospital and outpatient setting. I assisted in the presentation of a mini-topic on genomic medicine at the monthly Medical Intelligence and Innovation Institute (MI3) meetings. I also had the opportunity to present at grand rounds on the topic of chimeric antigen receptor (CAR) T-cell therapy (attached photo was taken during the presentation). With help from the Medical Innovation and Intelligence Institute, I have come up with a medical app idea that I hope will be available to the public within the next year.

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?

As stated above, I assisted in the presentation on genomic medicine at the monthly Medical Intelligence and Innovation Institute (MI3) meetings, as well as at grand rounds on chimeric antigen receptor (CAR) T-cell therapy. These presentation opportunities were excellent ways to practice public speaking in front of senior medical professionals. This internship also allowed me to build a network of physicians and other medical staff. The medical app that I am developing has the potential to greatly improve patient life.

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?
The research aspect of the internship encouraged the interns to come up with a solution to different problems within the medical field. These solutions were written up as an abstract to potentially present at the International Artificial Intelligence conference in December. Sewanee has provided me with a strong background in writing as well as performing research, which was very beneficial to me.

**In what way were your teamwork skills strengthened?**

The presentations at the MI3 meetings and grand rounds were performed in a group, so it was important that we worked together well. I was specifically able to help my partners navigate databases for research on the topics that we presented.

**How did your internship affect your career plans?**

Before my internship, I was 100% ready to pursue a career as a Pediatric Neuropsychologist, which required me to get a PhD/PsyD. I was fortunate enough to round in clinic with a Pediatric Neuropsychologist at the hospital for a week, and discovered that that is not what I want to do. The field was not at all as I expected it to be so I looked into other potential career options. After discussing at length with my mentor/supervisor who is a Pediatric Neurologist, I realized that I actually want to be a Pediatric Neurologist. I will apply to several post bacc programs this fall in order to obtain the pre-medical background needed for medical school.

**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?**

I did not experience people from backgrounds that I have not met. I've grown up in this area, so I'm very familiar with the various backgrounds that the patients came from. Going to school out of state as well as studying abroad has also allowed me to meet people with different backgrounds.

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

Take advantage of every opportunity! Get to know the doctors and write thank you notes to the ones that you shadow.

**Words of thanks to your internship funding donors:**

Thank you so much for this wonderful opportunity! I had such an amazing time and gained such valuable experience working with medical personnel. I would not have been able to participate in this internship if I had not been funded.