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**Branford College Class of 2016**  
**Class of 1960 Fellowship Summary Report – Summer 2015**

This summer, summer between my junior and senior years, I wanted to do something that would be relevant for my academic studies and future career but at the same time, thirsty for new places and cultures, I wanted to travel. As a STEM major, my goal for my summer is not only to do a science project, but most importantly, to attempt to see the way science is practiced around the world. Last summer I went to Japan. This year, thanks to the Class of 1960 Fellowship that I was awarded by generous Branford alumni, I was able to further this exploration. I was admitted into a bioinformatics internship at the Kenya Institute for Bioinformatics in Nairobi, Kenya. This fellowship was the sole reason I was able to get immersed into the amazingly rich and diverse Kenyan culture for 10 weeks while at the same time broadening my knowledge of bioinformatics.

My program was in two parts. The first component consisted of being an intern in the laboratory at the Kenya Institute for Bioinformatics. The first month consisted of intensive training and dry lab work. This means that I got the chance to learn and experiment with Perl and R programming languages, which are essential tools for bioinformatics scientists. I also learnt to use various bioinformatics software thoroughly. I then spent some time on understanding PCR, which is a method of separating DNA or proteins into components that can subsequently be analyzed. The learning curve was steep and mastering everything was a challenge, but nonetheless, the most rewarding part of my internship. I now feel confident that I have acquired the necessary skills to attempt a career in bioinformatics after graduation. After a month of training, all the interns were assigned specific projects to work on including pattern matching,

drug design and discovery, and running PCRs in gels in the lab. Unfortunately, this part was somewhat inadequately structured. It was nonetheless a valuable learning experience.

The second component was more of a personal project of observing how science, more specifically scientific research is carried out in Nairobi. This was particularly interesting to me since I am from Mauritius and would love to go back to my country or my continent to further scientific work in those places. Often developing countries do not acknowledge science as being a priority, which is understandable with other concerns of healthcare, sanitation and education. However, I believe that scientific research is at the forefront of what develops a country economically, as the United States and Europe have shown. My observations on this trip were quite different from those I had last summer. While I was pleasantly surprised at the state of science in Japan last summer, it was a bit disheartening to experience research in such a disorganized and unmotivated environment in Nairobi. I realize, however, that this in itself was a valuable learning opportunity. I now have the ability to compare the framework of research in the US, Japan and Kenya, and I am a little bit more aware of what are the things that need to be implemented to advance scientific research on the continent of Africa in general. Generous monetary investments, for instance, while crucial to research, seemed to be very lacking in Nairobi. I also noticed that while Kenyans are extremely intelligent, they have not been empowered to take daring initiatives in their research, as I have seen American scientists do.

This summer was definitely full of life-changing experiences and realizations that are going to be invaluable to me as I shape my post-graduation plans and my long-term career in general. I am very grateful to Class of 1960 Fellowship because without this award, I would not have been able to have such fulfilling academic and personal experiences this summer.