



Summer 1 Reflection Report

Rucha Benare

Laidlaw 2021

Research project experience

My experience so far has been nothing short of an amazing rollercoaster of character development. As expected, things did not go as they were planned; I had come into the program with a lot of expectations and not enough research. But at the same time, I was so excited that I did not think of the effect that the limitation of time would have on such an intense and intricate project- on a subject that was marrying two very different very broad disciplines like biology and engineering. Even though the entire process was different than the original plan it remained very exciting and developed in a very organic and beautiful way.

I found the engagement process with my supervisor welcoming and very constructive. He was very diligent in the way he planned the group meetings, the individual meetings, journal clubs where I got to converse with other Ph.D. students. And the process was quite rigorous; we constructively criticized the different types of journal papers and I got to know about fields that I didn't think even existed in today's world and it was amazing - all thanks to my supervisor. He gave sincere attention to every detail of the project- I had weekly meetings where I had to present my findings, what I was supposed to do during the week and the week after. And all in all, it was a very thorough process and he gave his best in managing whatever little time he could even have despite having an immense amount of workload, as researchers would during the year. I did engage with other people connected to my research, and given everyone would have their own factions it was amazing to see how people under the same umbrella of the subject could have such a broad spectrum of subtopics. Such that even a graduate from the field of biomedical engineering itself would not understand all of the sister factions due to their intricacies. I found it very alluring, and the realisation of being able to choose any of those fields in the near future changed the way I look at this program. This happy unexpected accident made me feel extremely grateful to have found it.

Some other challenges definitely were tackled along the way. I had a few logistic issues, as well as few problems common in the field of biology and medicine; sometimes the cell culture fails at the worst possible time. And the way to work around it was to have patience and to have a better sense of management of time. One logistic problem was my own personal failing in that my laptop would not work most of the time and it would not be compatible with many of the engineering software much needed during the time. My supervisor did help me gain access to the engineering department and the desired software which improved the efficiency of the work. This also allowed me to work on campus and gave me the reason to explore the town when the sun was out!

Amidst this exciting experience, however, I found it very difficult to handle working right after my exams I didn't give myself enough break. As it usually is the case, when one is very ambitious and wants to achieve a lot of things in a little amount of time, burning out is around

the corner. I definitely could have enjoyed it a bit better had I given myself enough break properly before I would work on the project.

The part I loved most about the process was simply the fact that I had a lot of support; there were people around me helping me, asking me questions about my project, encouraging me, and thus, guiding me. My supervisor or his team has been amazing with the way they have been diligent in the way they converse with us and carry out the process. Moreover, every leadership talk has been insightful. Every speaker we have talked to so far has always had something to say that changed my perspective about handling things in life a bit better.

Leadership attributes and personal development

My style of leadership definitely has changed over the past year with the help of the program because at first, for me a leader would have been someone who would simply sign off on decisions and their word would be the end-all-be-all. However, throughout the program, I realized that a leader is the one who truly listens. It is the leader who is most observant and in the truest form, a student. As the learning never stops. And that is the style of leadership that I have worked on- just to be an avid learner, to always assess the situation, to always be on the lookout, to always understand what has been asked, and to deliver it without any adulteration. There was not as much team collaboration as I wanted as it is a very lab-researcher-oriented part of the project but I hope to achieve more of it in the next term as the groundwork has been now been established. I hope to use my research and work in a collaborative space where we develop more on the research using different strategies and intersectional aspects, and ways of thinking- to develop something bigger than my research right now is.

And through this journey, I concluded that what constitutes good leadership is to always be a benevolent listener; to always listen, to be as empathic as possible, to be as adaptable as possible. And the type of leader I now have definitely included to not hold immensely high standards for myself and for everyone as that could lead to a lot of misunderstandings and misconceptions. Throughout the process, I learned a lot about my own personal resilience and levels of demands as well as the amount of determination most Laidlaw scholars have shown over the past few weeks of summer. I learned that I definitely hold immensely high standards for myself and others around me, this could become very strenuous if not regulated and that's something that would majorly contribute to my cycles of burnout. However, the levels of determination definitely help me research and read a lot of papers despite having personal problems during the summer. The energy and help my supervisor, Laidlaw coordinators and my fellow scholars gave me really helped me deal with handling work-life balance a lot better. And I'm proud of how I saw them all become more and more resilient as they navigated their own battles.

I found some of the leadership development sessions challenging in the sense that I had to handle my burnouts while taking breaks from my research and those times would be during the session which partly is due to not efficient time management but also because I felt I did not have enough time or energy on my behalf as I always wanted to interact the massive amount of amazing people that are out there. Some other personal challenges included navigating having these low amounts of sleep and energy altogether because I did not give

myself a break. This definitely changed the way I thought about the research and almost led to being the harshest judgment of myself. I however then realized that to truly become a good enough researcher, leader, or simply good enough contributor to society one has to first take care of themselves. So for me, it was the understanding that to value myself more than anything- before I could take on big leaps of projects and wonders in research my current perspective on.

My reasons for joining the program was initially just to have a scientific research internship; it was nothing more than that, it was that I loved science and I wanted to work on the project with my supervisor- I just didn't have money during the summer to do it on my own, so I wanted to just get by. However, now the leadership part of the program has opened my eyes to a whole other side of my personality that I did not realize I had. And I am immensely grateful for that. Through my leadership development experiences to date, I have learned a lot of things about my approach to personal challenges. At first, it used to be having a dozen of To-Do lists, it always would be to be on the edge and tick off every achievement or every downfall. And somehow connect that to my identity. However, now the way I handle these challenges has significantly improved because I no longer connect everything to define myself and I think that is a very huge change in my perspective which I am happy about. It is so easy for students to connect everything to their achievements; and because in today's rat race world of you are all-or-nothing if you do not have something to show on the paper, it is so easy to just very much disregard the way you think about life and the way you think about almost everything. So for me, just having the shift in perspective really change my approach to personal challenges as most of these no longer really affect my identity. My friends from past and present have reminded me that everything is a learning process- to be a better citizen, a better leader, and to help society in a way that is not turbulent.

Moreover, the best thing about the leadership training so far has to be the people. Every single person I have talked to has inspired me and this sounds redundant but it needs to be said. Every single one of the scholars has been a good friend of mine and I am glad that I got to meet each one of them because every interaction I have had so far has been very enjoyable. The solidarity we have garnered throughout the sessions has really helped me enjoy this program even more.

The thing I learned about my own way of communication regarding ideas with a diverse group is that I am good at it, and it is something I did not give myself enough credit for so far. Usually, when it came to applying to a lot of internships and places it is so easy to not actually care about our own strengths even when we put it on the paper. We usually do not credit or pride ourselves on it. We do not acknowledge how far we have come, how many good skills we have to offer, and how that actually does make a difference in the world. For me, I understood the way I communicated my ideas has improved, and that even my "non-scientific" friends understood my passion as they would get so happy to see how happy I was whenever I would be talking about my projects. Having such contagious affection and passion for my own research and realizing the same gives me the will to better handle projects in the future which I hope would be beneficial in making the world a better place.

One of the many areas of leadership I aim to develop in the future is to nurture my strengths in different cultural settings. There is so much to the world out there, so many different countries, sub-cultures, different styles of thinking. And I hope to understand how different people work in and celebrate the field of science, how they think, and how their cultural and socio-economic factors affect the way they approach a problem and help improve the worlds they live in.

And I am very excited about that.