

Laidlaw Programme Report: *My Experience*

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Abstract

Over the past two years I have been a member of Trinity College Dublin's 2019 cohort of Laidlaw Scholars. As a science student, the opportunity to further my research skills and hone my technical skills was what drew me to applying. However, the leadership component of this programme has far outweighed my expectations. It has allowed me to advance in unprecedented ways as well as growing my confidence in order to promote my best self and thrive in whichever field I choose to work in. This report details my personal experience as a participant of the Laidlaw programme and reflects upon my learnings and development as a leader. Due to Covid-19 disrupting research due to happen in my second summer of the programme, this report is formatted chronologically as opposed to separate sections on research and leadership development.

Reasons for Undertaking the Laidlaw Programme

Upon first hearing about the Laidlaw Programme, I was drawn to the opportunity to do my own research. I was really enthusiastic about my research proposal as it gave me an opportunity to amalgamate my love for science and my love for sport, as well as gaining crucial insights into lab work and research that would be necessary to further my career in science. Working autonomously really excited me as I thought I would be able to peruse different procedures, new methodologies and also heighten my skills in project management and data analysis. Initially, I thought that the leadership aspect of this programme was inconsequential for what I wanted to do with my life. I have always thought of leadership skills as necessary tools for large businesses and CEOs but not for disciplines of science. This was therefore not a consideration of mine at all during the application stage.

The Application Process

My experience of the application process for the Laidlaw Programme can be summed up in one word: terrifying. To begin, I spent a lot of time and effort compiling articles and studies about the topic I was interested in. As a second year student, I found it very daunting to navigate through scientific journals and to fully understand and appreciate what I was reading. Attempting to utilise this information to design my own experimental methodology was very challenging, especially considering I had not yet performed a lot of the techniques that I would have had to use in a taught laboratory. The research proposal required for the application was short. However, this just made it more important to get my point across in a clear, concise and impressive manner and it was imperative that I made every word count. After sending my application, I realised how disappointed I would be to not get accepted after putting so many hours into my research proposal.

After receiving a congratulatory email for making it to the interview stage of the process, it was apparent I needed some interview practice. We were instructed to make three PowerPoint slides and a three minute presentation for the panel reviewing the applications. I prepared my slides and practiced my script again and again. However, on the day my nerves got the better of me. I was visibly shaking throughout the entire presentation and my voice broke on more than one occasion. I really struggled with picking a point to look at and was so aware of my eyes darting from side to side while I was speaking. I left the interview defeated. I was happy I had given it a good shot and resigned myself to ensuring I bettered my interview and presentation skills for the next opportunity that arose. The leadership aspect of the programme began to sound more appealing to me.

Year one Leadership Training

It would be impossible to discuss all of the leadership training we have received over the last two years in only 3,000 words, so I intend to touch on my own personal highlights from everything we have done. Our very first leadership weekend was from 10th May 2019 – 12th May 2019. This was our first

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time meeting our entire cohort and the weekend was started by talks from Joel McKeever and Orla Bannon on ice breakers, elevator pitches and time management. This provided us with a superb opportunity to break the ice and get to know one another in a comfortable environment, and with the two people who would really mentor and guide us for the upcoming years on the programme. We also had the opportunity to visit the Global Brain Health Institute (GBHI) this weekend. Here, we were able to discuss with researchers on the GBHI leadership development team. They provide innovative training, networking and support to emerging leaders from around the globe focused on improving brain health and reducing the impact of dementia in their local communities. The researchers we spoke to were extremely inspiring and so passionate about their work and highlighted the importance of leadership training to effectively raise awareness of dementia and to share their research findings.

Cathal Quinn, the head of voice and speech at the Lir National Academy of Dramatic Art, completed a workshop on voice coaching and presentation skills with us during this weekend. This was one of the first things we did that began to change my perception of the leadership components of this programme. I previously thought that leadership training was a bit of a feeble attempt to make business qualities sound more valuable, however when I saw the dedication, years of training and passion Cathal had for his subject, I realised how crucial these skills are and how real time and training goes into perfecting these skills. The exercises we did on voice projection and calming nerves for public speaking really resonated with me; the girl who felt she had made a mess of her interview.

First Summer Research

My first summer of research consisted of reading, reading and more reading. My goal for the six weeks was to complete a well-rounded literature review, expand my overall knowledge of the topic and to highlight the areas I wanted to focus on. I also spent a lot of time learning about how to fill out ethical approval forms and the importance of ethical considerations in all scientific work; especially where handling private data and human cell samples is concerned.

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My hypothesis was “Does intense physical exercise have a notable effect on the genetic potential for the onset of puberty in pre-adolescent children? If so, does it differ between males and females?” It is generally accepted in the sport of gymnastics that the pressure placed on the body from such a young age is a large contributor to the delayed ages at which young female athletes reach puberty. However, Dr. Malina, a professor in the department of kinesiology at the University of Texas, has concluded that research conducted over the past four decades on this topic is largely confusing and inaccurate and neglects to consider basic genetic factors. Several more recent studies have suggested that delayed menarche may be caused by genetic factors and that girls who mature later often self-select sports that require relative strength and small bodies; such as gymnastics. Interestingly, many other professionals disagree as delayed menarche is also seen in children who train intensely for other sports, such as long-distance running. The age differences between female and male competitors partaking in gymnastics at an elite level must also be noted, with females generally being younger. Although, this is starting to change now with high level competitors making come backs such as Chelsie Memmel. However, the questions of why we see this age difference and why the general consensus is that puberty in the female has a much larger effect on the competitive abilities of the athlete than that of a male really intrigued me and drew me towards this research project.

Studying genetics accurately can raise ethical questions for even the most experienced of geneticists, never mind an undergraduate student. My biggest obstacle in my first summer of research was that in order to effectively tackle the problem of how a gene functions in a cell or organism, studying mutants that lack the gene, or express an altered version of the gene, would be the most effective approach. However, at the time I felt that this was beyond the scope of an undergraduate student and as such I was trying to find ways to effectively contribute to the research, and to my hypothesis, without requiring the use of mutant genes. After my first weekend of leadership training, I was equipped to recognise this as a perfect opportunity to begin networking. I reached out to many specialists in the fields of genetics and sports physiology and three of these specialists replied. I had

skype meetings with two of them, both based in the US, and they highlighted some potential areas I could focus on and lab techniques I could utilise in the time frame available to me and with the limited skills I had.

Year Two Leadership Training

In October 2019, we had the pleasure as a cohort to travel to the annual Laidlaw Conference which was held in UCL. This gave us the chance to meet other scholars, view other scholar's work and research, interact with one another in a more formal and professional environment and to watch some of our fellow scholars, including two from Trinity College Dublin, present their research in front of a large audience. I really admired those scholars who spoke and was so impressed by the calibre of research completed across all of the participating universities. I remember thinking I could never get on stage and speak the way those students did and was thoroughly impressed by their confidence and ability to communicate their ideas so effectively.

Our second Leadership weekend provided us with an interactive panel discussion on leadership and enabling innovation with leading innovators from a diverse range of fields. I found this extremely interesting as it showcased the many different perceptions of a successful leader and once again shattered my prejudices regarding leaders and leadership skills as things only considered in large corporate offices.

In February of 2020, the entire cohort participated in a residential weekend at the Kippure Estate, Co. Wicklow. This involved a series of leadership workshops facilitated by Gerry Hussey, a leading performance psychology consultant. He really challenged all of our thinking on what it means to be an effective leader and how to promote the best version of you possible. This weekend was a valued opportunity to spend more time with each other and get to know our cohort really well. This weekend really solidified the friendships made and the general respect in the group for one another and what

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we were all working on. This weekend is also especially cherished as the last real opportunity we had to all be together, as Covid-19 was beginning to appear. Approximately 2 weeks after this, Ireland went into lockdown and I am very grateful that we managed to fit this in beforehand.

As part of our second summer leadership development, we were provided with a personal coaching session with experts in the field of career guidance and leadership coaching. This was one of my absolute highlights of this whole experience. I felt energised and enthused after my session and am very grateful to have had the opportunity to meet with such an expert. She highlighted my strengths as well as my weaknesses and together we assessed the best steps for me to implement to improve areas that are important to me, such as public speaking. My coach was so adept at breaking what seemed like huge, daunting tasks into smaller goals that are far less intimidating. I have never been as productive as I was in the weeks following that meeting and feel like I really made some headway with analysing the different avenues available to me upon completion of my undergraduate degree.

We were also once again graced with a workshop from Cathal Quinn, under quite different circumstances this time as we had to do it over Zoom. After focusing on voice projection and confidence the previous summer, this summer's workshop with prioritised presentation and how to command the room. Even over Zoom, I could feel my nerves creeping back in. However, with every leadership weekend or with every workshop, I noticed improvements and despite the continued presence of some nerves, I now had adequate tools to deal with them and use them to my benefit.

Leadership in Action (Summer 2)

For my second summer, I decided to apply for one of the leadership in action opportunities with the Laidlaw Foundation. My ethical approval had still not come through and I was doubting whether I would be able to complete my laboratory based work that summer. I decided to apply to travel to Fiji with Think Pacific. This application process gave me another opportunity to work on my interview

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skills as I had a long and detailed phone interview with Think Pacific. This was also my first opportunity conducting a phone interview and I was able to put into practice a lot of the work we had done with the Lir Academy the year previous. Voluntourism was also a topic I was very ignorant to before this. Some of the scholars in my cohort expressed their concerns about voluntourism arising from these leadership in action opportunities. I know some of the skills we learn directly from the programme are obvious, but I am also grateful for all of the indirect lessons that arose from working with such a talented group of people. It is only from listening to my fellow scholar's thoughts that I learned that I too need to put more pressure on myself to think critically about what I apply for, why I want to apply for something and to take full responsibility for my participation in whatever I choose to do. After speaking with my Trinity College supervisors and doing some more research into the organisations running these opportunities, such as Think Pacific, I was confident in my decision to apply and happy with their reassurances that this was not a 'voluntourism' opportunity.

Due to Covid-19, the Think Pacific expedition was cancelled and spending my second summer of research in a lab as planned was also no longer a possibility. Luckily, the Laidlaw Foundation recognised that some students were struggling to fill their second summer once their intended research paths were no longer available. Simultaneously, Covid-19 had caused the temporary closure of educational institutions all around the world by governments desperate to contain the spread of the virus. Makesense, in collaboration with the Laidlaw Foundation, created the Reaction for Education Initiative. This initiative brought together Laidlaw scholars from universities around the world in an attempt to create new resources, raise awareness for existing resources and to help mitigate the direct and urgent impacts of school closures due to Covid-19. Makesense is a non-profit organisation that offers tailored support to help social entrepreneurs achieve their goals.

Participating in the Reaction for Education Initiative allowed for the examination of challenges arising in education due to Covid-19 in the locality, as well as provision of the opportunity to create an open

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and constructive dialogue regarding areas for improvement in our education system and how to be better equipped in the event of continued school closures. The opportunity to develop a project from the research phase right through to finished product provided me with a new and challenging experience. This allowed me to further develop my personal skills, such as project management, teamwork and organisation skills as well as fostering creativity and individuality; two things which I tend to struggle with. Makesense and the Laidlaw Foundation brilliantly catered for a diverse and conscientious group of scholars. The speed with which the Laidlaw Foundation responded to the limitations caused by Covid-19 on scholar's research to offer the delivery of this initiative instead is greatly appreciated. I really believe this initiative has strong potential to utilise the creativity and knowledge of students to continue to create real impacts on education systems globally, even after Covid-19. For further insight into my experience with the Reaction for Education Initiative, my report can be found on my Laidlaw Network page.

Gains from the Laidlaw Programme

The gains from partaking in this programme vary from person to person however the general consensus is that it is one of the most personally rewarding experiences. My new found self-knowledge and awareness has provided me with the ability to assess my personal contributions and deductions in any professional or team working environment; a critical skill for productivity in the workplace. Another area I really think has improved for me personally is my awareness of current events and cultural intelligence. Being surrounded by so many creative scholars from so many diverse backgrounds brought about many discussions and debates and I have been taught how to critically assess situations, to check information from multiple sources before forming an opinion on anything and also how to react more empathetically towards opinions and experiences that differ from mine, as just because they are not mine does not make them any less relevant.

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The biggest benefit of the programme for me has been the improvement in my communication skills. I am slowly but surely gaining confidence in speaking to people, in using my elevator pitch and putting myself out there. I used to allow the vulnerabilities of interacting with new people, networking and of speaking to experts far more versed in their fields than I stop me. However, I now know that the only way to gain insights, progress my knowledge and develop my career is by doing these things. I still get nervous when presenting or speaking in public however, I am much more aware of the methods available to me to deal with these nerves and to still communicate effectively and confidently.

Hopes for involvement as an alumnus

My hope as a Laidlaw alumnus is to collaborate with Joel and Orla in any way they need with all of the undoubted success with the upcoming cohort of scholars. I would really love to remain involved and to be able to pass on my experience of the programme to ensure the accomplishments and productivity of all of the new scholars. I want to continue to actively learn from and maintain relationships with all of my cohort by keeping up to date with their research and professional experiences. The platform provided by the Laidlaw Scholars Network will also allow for continued networking and interaction with Laidlaw scholars from all over the world who have similar fields of interest.

Conclusion

This programme is really an aggregate of personal research, leadership development and the encouraging, supportive people you meet along the way. The attainment of self-awareness has heightened my self-confidence as it has provided me with the knowledge of where my strengths lie as well as the tools to deal with areas I am weaker in. The transferable skills and behaviours developed throughout, such as self-motivation, critical thinking and decision making, are going to benefit me no matter what career path I choose. The one-to-one mentoring received from our research supervisors, as well as from career coaching, has helped to enhance my professionalism as well as elucidating post-

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graduate studies and career trajectories that I am really enthusiastic about. I began this programme with a sole focus on gaining research experience. I never could have predicted the leadership development and personal progression I have also attained. I am very appreciative to Joel and Orla for this wonderful opportunity.