

Appreciate, Discover, Develop Leadership

From acceptance to appreciation

I felt guilty when I got accepted to the Laidlaw Programme. Of course, my first feeling was great happiness but the excitement mixed with hesitation. I applied for the scholarship mainly because of the independent research aspect. It would be a nice bonus to learn about leadership, but being a *leader* was not part of my career aspirations. Back home modesty is an asset whereas leadership is associated with bossy selfish people who demonstrate their superiority over others and lack empathy. I have always been open-minded but cultural beliefs and stereotypes are hard to break. What I felt guilty about was my research enthusiasm, compared to my *acceptance* of the leadership aspect. Eventually, it was exactly this negative prejudice towards leadership that made me benefit immensely from the Laidlaw Programme. I realised what leadership is about, learned to appreciate its importance and discovered a hidden leader in my-shy-self.

Leadership and Science

My *leadership acceptance* mindset changed over the workshops, discussions and personality tests, including the DiSC profile. Not only did I learn about leadership, but also about my strengths and weaknesses. My initial (mis-)understanding of leadership was outdated and very different from the modern theories and research findings. This continuous learning process and the chance to practice leadership convinced me that

The idea behind the Laidlaw Programme is brilliant!

Why not just stay in the biochemistry lab, growing cells and purifying their proteins? This is totally okay, but if findings are not widely communicated, science turns into an expensive activity, that could be practiced by a small community. Now, I embrace the opportunity to develop as a leader so that my research has a real-world impact instead of remaining forgotten in the infinite database of scientific papers. This happens too often. One of the many examples is the fact that scientists discovered climate change

more than a hundred years ago, but effective measures against it were introduced just recently.

The workshops organised by the Laidlaw Foundation inspired me to engage in discussions about global issues, to educate myself about a range of topics from deforestation to international politics. I used to incorrectly associate leadership qualities with an egocentric and bossy personality but was reminded about honourable leaders who reduced poverty and worked for a sustainable future. The most fascinating part was the opportunity to practice leadership during my independent research on viral enzymes, the Leadership in Action (LiA) Project and by being a STEM Co-leader of the Laidlaw Network.

My top 3 takeaways are that becoming a leader is the most logical and effective way to achieve my goals, that I am capable of leading with integrity and that leading in an altruistic way is easily feasible.

High-tech Research vs Field Work

I spent my third year of university in Canada. Because of the lovely people, I met there, studying on a different continent was less challenging than expected. Being a Laidlaw Scholar and having lab experience from my independent research boosted my confidence and motivated me to apply to work in a state-of-the-art lab at Queen's University. Dr Peter Davies very kindly accepted me into his team, where I investigated the structure-function relationship of an antifreeze protein. Sadly, living so far from the beautiful city of St Andrews, I missed the in-person Laidlaw events. Together with other scholars who were also unable to attend the leadership weekends, we organised online meetings and worked on the assignments. It was not the same as meeting in person, but the activities were equally beneficial and we faced different challenges. Organising an online meeting for busy students located across several time zones is all but easy and I remember waking up at 5 am to give a group presentation. Although we probably did not develop our public-speaking skills, all of us had to adapt to the circumstances, demonstrated resilience and improved our team-working skills.

At some point it seemed like I had become way too confident and naïve. This was not because my goals seemed much easier to achieve, but because I thought that I know

what they actually are. It was the right time to start my LiA project in Ghana, where I got more humbled and learned the meaning of contextual leadership. Volunteering for communities in need was a life-changing experience. The LiA project redefined the way I look at sustainable development. I was inspired about my future research and consider focusing on the current issues in developing countries like food security, access to drinking water and resilience to climate change.



Figure 1. Testing protein activity at the Davies' Lab, Canada (left) and determining the GPS coordinates during water sampling in the rainforest, Ghana (right). Summer of 2022.

It might be just random or on purpose that in the Laidlaw Scholar Attributes Table *empathy* is at the top of the list. This personal quality comes before critical thinking, time management and confidence. Empathy was also the only leadership attribute that I was confident in, two years ago. It turned out to be sufficient to begin developing the rest. During my independent research, I improved my project management and analytical skills. The LiA project, helped me develop my critical thinking and team-working skills. I became more resilient and aware of myself.

I have never been able to look at people or animals suffering and not feel scared, sad, and sympathetic. Therefore, I was very excited about being a Laidlaw Scholar and helping underserved communities. In the second summer, I volunteered with World Vision in collaboration with Columbia University with the goal to improve water access

and sanitation in the most isolated communities in Ghana. I joined the water quality lab team working inside the lab and on the field to ensure that water is safe for drinking and stored properly. Limited funding made the lab so inevitably sustainable. While I adapted easily to the restricted resources, the hardest aspect was gaining the trust of the locals. It was crucial to work with staff from Ghana so that people would let us take samples from their houses.



Figure 2. My colleague Elvis and I went to some of the most isolated communities across the Asutifi Region, Ghana, to take water samples for chemical and microbiological analysis.

My LiA project aligned well with my leadership statement from the Laidlaw application. There, I was advocating for improved science communication and accessibility in developing countries. Two years later, I have worked in state-of-the-art labs in the UK and Canada, in arguably developed Bulgaria, and in developing Ghana. This precious experience enhanced my understanding of the problem, as I saw it from different perspectives. I used to consider financial factors as the main barrier to quality education and research. However, I realised the complexity of the problem, the variety of geo-political, social and cultural factors that influence educational access and science communication.

Reflections

The leader is not necessarily the smartest or the most charismatic one. It is not a single quality that makes you a leader, it is not even just a matter of qualities. Leaders believe in the overall goal, see the strengths of the team and overcome challenges creatively.

A major part of the Laidlaw programme is concerned with personal values and limiting beliefs, both being an essential part of leadership development. My core values are mentioned throughout the essay, while I have not yet shared the limitations that I faced. There are sometimes moments when I expect to fail but this does not discourage me and I love when I prove myself wrong. Tackling challenges has not got easier, but the types of challenges have changed. Two years ago, it would take me weeks of contemplation and several drafts before asking Dr MacNeill, if he would be happy to supervise my Laidlaw research. In contrast, in the past few weeks I have been communicating actively with Columbia University, the USA, and two NGOs in Ghana. I felt more confident and relaxed, I knew my audience and goals. Together with Alisha, a Laidlaw Scholar from Columbia University, we received a grant of \$2000 for our proposal of a project aimed at improving sanitation and hygiene at the Anglican Junior High School in Bogatanga, Ghana.



Figure 3. Alisha and I visited the Anglican Junior High School in Bogatanga, Ghana.

All the challenges, achievements and people I have met helped me improve my leadership skills. I doubt there is a person who has never experienced disappointment, stress, discouragement, or fear. My Leadership in Action project triggered all of these feelings. In addition to the exciting and enjoyable moments, I faced many challenges while volunteering. Sometimes the solution came from reflecting on the situations, but there were moments when I looked for my mentors' advice. Feeling extremely discouraged after observing the extreme poverty in the Upper East region of Ghana, I asked my mentor Dr Opong, the Regional Director of WASH and Capacity Building, what keeps him motivated.

'The smile of one child,'

he replied. I like this answer...

Future Aspirations

While my greatest passion remains research, I began to appreciate the importance of having a diverse set of skills and awareness about global issues. The Laidlaw programme has motivated me to find creative solutions to real-life challenges. I put integrity first, listen to all sorts of opinions and reflect on my observations. Thus, I can speak out with confidence and stand by my decisions.



Figure 4. Cocoa beans which were let to sun dry.

I aspire to be there to empower people, letting them reveal their full potential. My DiSC profile suggested I learn to say *no*, but I prefer to say *why not* instead. In the best-case scenario, the team will change the world, in the worst-case scenario, we will discover *why not*.

Is global awareness that important, when we are a tiny little bit of the world? Depends on the person, I guess. For me, it is essential because it guides my decisions. Instead of acting simply

according to my emotions and ambitions, I think critically about the long-term consequences of my decisions. I do not want to appeal for saving the planet for the sake of the poor. Neither do I want to accelerate social development for the sake of the environment. This would be like campaigning against mining in Ghana (due to its ecological impact) after I observed its contribution to regional development. The Global Collaboratory sessions, organised by Columbia University, taught me that the most worrying global issues require a holistic approach and creative ideas. In brief,

Specific problems do not have specific solutions.

To go with the flow of daily life is easy, but it is also a prerequisite for steadiness, which limits progress. Learning about leadership inspired me to stop and think. Guided by integrity, empathy and altruism, I will continue to develop my leadership skills, in order to multiply the change that I wish to make. In the near future, I plan to apply for an MSc in Biotechnology to advance sustainable development and reduce the cost of doing research.

I want to express my greatest gratitude to Lord Laidlaw, the Laidlaw Foundation, and the St Andrews Laidlaw Team. It is an honor to be selected for the Laidlaw programme and being a Laidlaw Scholar is one of the most inspirational experiences in my life.