

Dr. Gregory McCluskey

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Introduction

Dr. Greg McCluskey completed an undergraduate degree in Biology at the University of New Brunswick. Dr. McCluskey initiated a master's degree in Dr. Ro's lab at Dalhousie University studying mammary tumours but switched to a PhD in Dr. Stephen Bearne's lab, studying CTP Synthase, having success and winning the Patrick prize for his efforts. Currently, Dr. McCluskey is a post-doctoral fellow at the University of Ottawa studying evolutionary biochemistry and molecular physiology, a high-profile subject among biochemists.

What was your graduate school experience like?

Overall, graduate school was a positive experience for Greg. The master's portion was more difficult given the change in laboratory, as well as a complete change in topic of study. In Greg's opinion, master's degrees are highly stressful given the high pressure to produce results in a short time frame, while a PhD program allows for time to actually make mistakes, learn, and build upon mistakes and difficult systems.

What are the best and worst parts of your current position?

Greg currently works as a post-doctoral fellow at the University of Ottawa and has a lot more freedom. Not to say that a PhD does not allow for freedom, but he currently has the freedom to flesh out experiments and projects, increasing overall academic freedom. Greg is encouraged to



take on projects that his PI finds valuable, but also to develop his own projects that fit with the lab structure and push different interests. For example, if a post-doctoral fellow proposed research worth funding, his PI would approve of it. The main pressure on post-doctoral fellows, according to Greg, is the level of trust and reliance on them producing ready-to-publish results forward. Further, the post-doctoral fellow position holds a higher pressure as it is short, causing a time-crunch with high expectations on the worker. Overall, the post-doctoral fellowship role is a tough but rewarding one, optimizing academic freedom and results.

What are your career ambitions and why? (i.e. industry, academia)

Greg is hoping to enter the field of academia as a faculty member at a University, which would allow him to push the boundaries of his academic research and work. Greg wants to have the freedom to study what he wants to study and push research in ways that tie his gathered knowledge together. In other words, pushing thematic questions that he has found in his experience. With regards to academia versus industry, Greg favours academia, indicating that the freedom he mentioned in his academic desires does not come as easily in industry, while in academia he can push the “why” and “how” of his projects.

Also, Greg joys teaching and passing along his knowledge, allowing others to support the desire to constantly grow and learn. However, there is an inherent difficulty in academia to balance teaching a reseaching.

What is your day to day workflow?

As a post-doctoral fellow in a large lab, Greg’s lab shares a floor with five other labs, which allows sharing of equipment and getting help from a variety of expert sources. It is much easier to troubleshoot with peers, but lacking a heavy influence from the PIs, as they are typically located elsewhere in larger labs. Greg highly values the workflow and freedom of his academic position, over the contrasted industry positions, which spend a lot of focus and time on standard operating procedures and less on creativity.



What skills, attributes, and qualities should graduate students come out of graduate school with looking for jobs?

- Discipline and dedication, sticking with your project
- Thick skin and avoiding driving yourself crazy with minor failures and flaws within research
- Confidence and the ability to speak up with yourself
- Effective communication skills
- Observational skills are key, especially in continued work in research

Overall, Greg indicates that the most important attributes usually come back to discipline, keeping on task, and admitting when things are going poorly.

Advice for graduate students looking towards their futures?

Whatever subjects you find interesting, read into them deeply and thoroughly, through books and literature. Always enter a subject matter knowing as much as you possibly can. Greg reiterated that if there is nothing that is currently interesting, one should constantly be seeking out subjects, jobs, and projects that are interesting. There is a distinct difference between how things work and why things work, the key is finding the distinction within one's own work and life.