Andrew Bickell

Guest Speaker Quiz:

Describe what you learned from the entire speaker series:

Overall, the main takeaway I've gotten from these guest lectures is that some of the most important elements of a successful career as a scientist are things that not well addressed in an undergraduate science education. Things like networking, science communication and data analysis are clearly fundamental components of the daily life of a scientist. I feel as though I've gotten plenty of practice taking tests but haven't had the opportunity to practice these important skills. I feel very fortunate to have had the opportunity to come to BMSC and hear the advice of people in my field of interest, and I intend to actively seek out guidance in these areas where I believe I'm currently lacking.

In Dr. Sean Godwin's talk, he recommended that we learn some basic programming and modern statistics that we could take with us in a future career as ecologists.

I've been surprised how much time I've been spending on my computer these passed couple weeks, and I don't see that changing much as I move forward in my career as a scientist. I think that speaks a great deal to Dr. Sean Godwin's advice about becoming more comfortable with basic programming languages like R. I've learned a great deal in this course alone about how R and other programming languages can be useful to me, especially for organizing data and clearly representing the findings of a study. I didn't even know how to clean a dataset before coming to BMSC, in my few previous courses that used R I usually just regurgitated the template provided by the instructor. Though I'm grateful for what I've learned about R in this course and in ADA, I'd like to have this skill become more intuitive. In the future, I'd like to take some free online courses about R to become even more proficient and learn Python as well.

Dr. Godwin also recommended that we connect with people who are doing the things we want to do.

One of the most important lessons I've learned so far during my time in Bamfield is the importance of networking, which is something I've overlooked in my degree thus far. This is the first time I've been surrounded by people in my field of interest, and I feel like I've learned more about my field from conversations I've had here than I have in any of the lecture-based classes I've taken so far at SFU. I'd like to open more doors for myself as I get closer to graduation, so I've reached out to a couple professors at SFU to discuss my current DS project. I have a meeting this Tuesday with Dr. Leah Bendell, who was the primary author of one of the papers that inspired my project. I'm looking forward to this meeting, and I'm inspired to try and network more at SFU, even with the limited time I have left there. I'm hoping to make some lasting relationships that will lead me to more directed studies courses and hopefully someone who can supervise me in an honours project.

In Dr. Emma Atkinson's talk, she discussed how important communication is and how good communication supports good science.

I think the value of communication is understated in a lot of science-centric spaces, at least in my personal experience at SFU. Being able to organize your thoughts and write well are clearly critical components of the scientific process that I believe are overlooked in the current education of undergraduates in science. I chose to take an English minor at SFU mostly because it was something that I found fun and interesting; I didn't decide to take English courses for any career-related reasons. I've often joked that an English minor is a useless thing for someone getting a BSc to have, but in hindsight I think that decision will make me a better scientist. I believe that my English education has made me a better communicator, but I also believe that its taught me to think about things in a different way than other people in my field. I hope this different perspective will also support good science in the same way that good communication will.