

Guest Speaker Quiz

- What you learned from the entire speaker series (5 points)

Overall, the speaker series was a really rich learning experience. Each guest speaker had a different path in science, researched different topics and gave us different key takeaways. From Dr. Hennessy's guest lecture, I learned about the world of scientific illustration and how other scientists can commission artists for their scientific drawings. It turned out to be useful when we were doing our Species ID project, as I used her tips to draw barnacle diagrams. From Emma Atkinson's lecture I learned about her modeling of the complex spot prawn lifecycle, and how her mentors have been a key component of her career so far. From Dr. Godwin's lecture I learned about the different positions he holds as a scientist (researcher + expert witness for first nations) and how his programming and statistics skills have been important to get him where he is today. And from Dr. Calwood's lecture, I learned the importance of being a great scientific communicator and how people-skills are very important to getting quality data and using that data to inform and educate. Overall, I learned that paths in science are non-linear and that every experience has value. I also learned that just getting good data and publishing papers is not exclusively what makes a good scientist. Being able to network, and communicate your passions and skills is also a big part of success.

- Three vital pieces of information were given to you to succeed as ecologists (6 points)

The first piece of information I was grateful to receive, is that scientific paths are non-linear. Emma Atkinson mentioned this as one of her takeaways and it gave me reassurance that although I may not have a concrete career goal in mind, I can still make a path for myself that doesn't involve the 'traditional route' of academia. Additionally, Dr. Calwood mentioned this when she was talking about how she achieved her dream job not through a linear path. She went to grad school, worked as a scientific educator, did contract work, and then finally came to her dream job. I think this piece of advice really resonated with me since I am already in the 5th year of my undergraduate degree, and a lot of my colleagues have already graduated and got jobs or are already in grad school. Sometimes I feel as if I am behind, but because I took an extra year to complete my degree, I got to come to BMSC which I think was 1000% worth it and will also probably (positively) affect the path I take in my life.

The next piece of advice that stuck with me was about networking. Both Emma and Sean mentioned this in their key take-aways, and most of the other speakers mentioned it during their lecture/question period. I think that connecting with people doing the things you want to do is an important skill in life and I will continue to try and make those connections as I move through my career.

Emma and Sean also mentioned the importance of computer skills to complement field skills. Although I am not yet proficient in coding, I think I have come a long way from when I first began university. Learning some stats (more than T-tests) and basic coding skills is super beneficial to future job prospects. Emma recommended finding good mentors and working on diverse projects to develop these skills.

Lastly, one of Dr. Calwood's takeaways was that context is key. This means to consider cultural context and the scope of the problem when doing scientific research. For example, some problems are unique to particular places and people, and it is important to take this into consideration when extrapolating the results of your research to other contexts.

- What information from the lectures you were able to use during the course (4 points)

One piece of information that I will use outside the course, is the recommendation to get computer experience. I am planning to pursue grad school so I think this will be very beneficial, and I have already gotten a start with the classes I've had at BMSC, but I also want to go further as well. For example, we learned how to build models in R during this class, and in ADA we've learnt how to make graphs in R. My next goal is to start making all my graphs in R (instead of excel) so that I get more familiar with the language, and I also want to try to learn Python.

I was able to use Dr. Hennessey's scientific illustration tips during the Species ID assignment for this class.

Another piece of information I was able to use, was that 'context was key'. Dr. Calwood mentioned this in her talk, and I think this applies really well to our DS projects. Our project looks at removing a biofouling species of tunicate from aquaculture gear. Even though I've been focusing on technical aspects of the experiment (how many replicates etc.), it's important to remember that this would not be a scientific question without the given social context (aquaculture). In fact, our whole project is surrounded by the 'bias' that this species of tunicate is 'bad', and even though this is just one example, it is important to keep this advice in mind for future research.

And the last piece of advice that I am taking away from this course is connecting with people doing the things I want to do/networking. Since I want to have a summer job as a field assistant, I am going to email a masters student I know to see if she has any positions open for the summer. Even if she does not have any positions open, I think it will still be a good chance to network, because you never know who will recommend you apply for a job/ offer to introduce you to someone etc. When I start my masters next September, I hope that by talking to other grad students/faculty in my department I will build connections.