This semester this DIS has taught me a multitude of things. Technical skills that I acquired were learning about R and how it can be used in a laboratory setting, how to code, and how programs like gg-plot can be a useful tool in displaying biological data. Additionally, I acquired a new respect for the students in the lab that work on projects like this all the time and much more patience in myself as a scientist and a student.

At the beginning of the semester, I spent time working through tutorials on how to use R and gg-plot. I am usually able to pick up new skills relatively quickly with practice, but coding is an area that I had no previous experience in or any familiarity with. It surprised me at the amount of time it took me to work through the tutorials to make sure I was learning all the intricacies of the program correctly. Coding in a process unlike anything I have ever done before; simple mistakes like adding an extra space between characters would cause an error. Because of this, I asked for much more help from my peers in the lab than I have on projects in the past, especially Thomas. He was a great help for when I got stuck on a line of code that I did not know how to write properly or when a new error message would pop up that I did not understand. He also provided additional clarity on the information in the data sets that I was using and helped to explain what all the variables were and why they were important to what I was trying to accomplish through this project.

One aspect of this project that surprised me was the amount of time it takes to load data sets and write even a few lines of code. When I came across something that I did not know how to write properly, I found myself doing a lot of research on line and reading forums on R to pick up new functions that might work for what I was trying to accomplish. This process took much more time than I initially expected and I found myself getting frustrated when I was not making a lot of progress in a day. My peers in the lab were very encouraging and kept reminding me that any time you take learning about something online that can make your code work or work better is progress. One aspect that I enjoyed about this process was that I was constantly making mistakes and learning from them, something I feel you can only get exposed to if you are working on research in a DIS that is a bit out of your comfort zone.

While this project was a huge learning curve for me, I feel very fortunate to have had the opportunity to broaden my skills in the area of computers and getting the chance to learn how these programs aid in genetic research. Learning R is a skill that I now have that I can bring with me to future careers in science and to graduate school which I feel would be an asset to tasks and projects that I get assigned. The things I learned in my DIS this semester aren’t provided in classes within my major and are something that I would not have otherwise been exposed to. There is no learning comparable to the hands-on experience of being in a lab and being able to execute tasks that I have only been able to read about before. This lab over the last year has grown me so much as a researcher, scientist, and student and has been one of the largest assets to my education and future career in my time at UNCW; working in this lab is something that I am grateful for everyday and is something I will truly miss after I graduate.