To: Dr. Erika Paterson, ENGL301 99A Professor From: Aleem Tariq, ENGL301 99A Student Date: November 13, 2020 Subject: Progress Report on Formal Report Assignment

This is a progress summary on my formal report, which addresses the importance of pursuing additional computing background for students in the Life Sciences.

## Audience

The primary audience of this report are UBC undergraduates in the Life Sciences. A case may be made that the departmental head of UBC Biology should also be notified of the findings.

### Purpose

The purpose of the report is to:

- Explore the importance of Computer Science in the field of Biology; industry and research.
- Investigate the current offering of UBC courses at the intersection of Biology and Computer Science
- Communicate with faculty in the Life Sciences, collecting data on the computational tools they both use in research, and demand from prospective researchers.
- Develop a strong case to sufficiently motivate my intended audience to acquire a computational background beyond the minimum pre-requisites.

# Significance

Although the case will be made through my report, there is no doubt in my mind that obtaining a skillset in Computing is a significant return on investment for a student in the Life Sciences. I will demonstrate that such skills are not only required at present in research labs, but will be both increasingly in-demand and eventually largely encompass how one approaches problem domains in Biology.

# Research Plan

Primary Source:

- Surveys and Interviews with research professors in the Life Sciences, specifics:
  - $\circ$   $\;$  Inquire about the expectations made of students interesting in research
  - $\circ$   $\;$  Inquire about the computational tools used in research
  - o Inquire about what sorts of specific computing skillsets are preferred
  - Inquire about the role of computing in the field, present and future

Secondary Source:

- Online information regarding the impact of Computer Science on Biology
- Analysis on techniques involved in large numbers of cutting-edge Biological research papers

## Writing Schedule

- Nov 13<sup>th</sup>: Contact all professors, notifying them of research and requesting their input (no survey included)
- Nov 15<sup>th</sup>: Contact all researchers, notifying them of research and requesting their input (no survey included)
- Nov 16<sup>th</sup> 20<sup>th</sup>: Surveys sent to professors, researchers and students (tentative: according to feedback)
- Nov 23<sup>rd</sup>: Analysis of survey results and secondary research
- Nov 27<sup>th</sup>: Complete and summarize the research
- Dec 1<sup>st</sup>: Complete Formal Report Draft and post on team forum
- Dec 11<sup>th</sup>: Revise formal report based on peer review
- Dec 13<sup>th</sup>: Additional revisions, incorporation of data
- Dec 17<sup>th</sup>: Formal report deadline and report posted on team forum

Please let me know of any suggestions in so that I can make improvements to my plan and schedule. I look forward to continuing my research once I receive your approval for my scheduled writings. Thank you!