This research award was used to analyze samples and gain preliminary results that will determine the direction of my thesis project. Nutrient analysis is an important part of my thesis project and it is also a costly component. This research award enabled me to submit preliminary samples and determine the progress of my experimental research. Establishing nutrient compositions in nitrogen manipulated eelgrass will help solidify my hypothesis, that excess nutrients in an eelgrass ecosystem impact all trophic levels by increasing algae biomass, grazer populations, while simultaneously decreasing eelgrass robustness.

This research was composed of two laboratory experiments, each of which was enhanced with nutrient additions. Eelgrass plants were grown under varying conditions in these nutrient enhanced environments. In order to detect differences between treatments, plants and their rhizomes had to be analyzed for carbon, hydrogen, and nitrogen content. Below are graphs depicting these elemental percentages.

Figure 1 depicts the carbon/nitrogen ratios for eelgrass above-ground tissues. The sample size analyzed is too low to calculate standard error, which would indicate if there are significant differences between treatments. However, the graph does show subtle differences between treatments, indicating that further analysis may reveal treatment differences. Figure 2 depicts eelgrass rhizome nutrient content between treatments.