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BLOG POST

This summer I had the amazing opportunity of being a part of the summer research program at San Diego State University's (SDSU) marine ecology research facility, the Coastal and Marine Institute Laboratory (CMIL) and San Diego Mesa College Impactship.

This is my first experience as an intern on a research project. I am very grateful for the opportunity to be part of this project. I have always been curious about new methods to help the environment and learn about the animals. The past summer, I had the amazing opportunity to be a part of an amazing team (Monica Klopp and Ariana Dial) that introduced me to the world of marine science.

I learned so much information and gained experience that can help with my major decision in the future. I got the opportunity to help with a scientific research in a lab facility, to learn about marine animals (oysters and mussels), and connect with information that complements my experience, such as marine biology topics, learning to read scientific papers, learning about where to find work and much more.

My Team

For this year's research program, I was working alongside my masters candidate mentor, Monica Klopp , and Arianna Dial student intern from San Diego State with major in microbiology.

What I did this summer?

Our project tested to see if there is a change in the gaping and heart rate activities of mussels in deoxygenated conditions.



BACKGROUND

The oxygen limitation theories can be used to explain the physiological and behavioral responses to deoxygenated conditions. When oxygen levels decrease, particularly in low oxygen or no oxygen conditions, these organisms experience reduced metabolic rate and activities. This can be observed in decreased shell gaping and lower heart rates, as the mussels conserve energy and adapt to the oxygen-poor environment.

In this project, we used the comparison study since we take notes and differences in oxygen and different habitats of the animals. Just as we consider the causation experiment study is used since different samples are taken and the animals are separated in different tanks. However, we consider that natural experimentation can also be used since by taking measurements and measuring its reaction, we did it in a normal way and then perform its analysis and comparison.



Something I learned from the workshop on how to read scientific papers was to identify the different sections for a quicker understanding, as well as how to differentiate an observation from a prediction and how to make hypotheses within a scientific project. As part of the summer project, I learned how to take notes based on observations, place gape and heart sensors on animals, and calibrate them. I also helped develop the sensors on campus with my mentor.

I'm so thankful for:

I would like to thank Alyssa, Lily and Carole for the meetings (beginning and final) where we see and asked for my progress in the program, as this helped to create a channel of communication. Together we worked on my SMART goals and how to improve my performance despite English being my second language. I would also like to thank my teammate Arianna for her patience and support as she was always there to explain things I didn't understand and was always helpful when we worked as a team. Finally, I would like to talk about my mentor Monica as she was always accessible with all the information and resolving doubts so that I had adequate development during the program.



Being part of this program helped me to learn more about marine biology and whether I would like to pursue a career in this field.