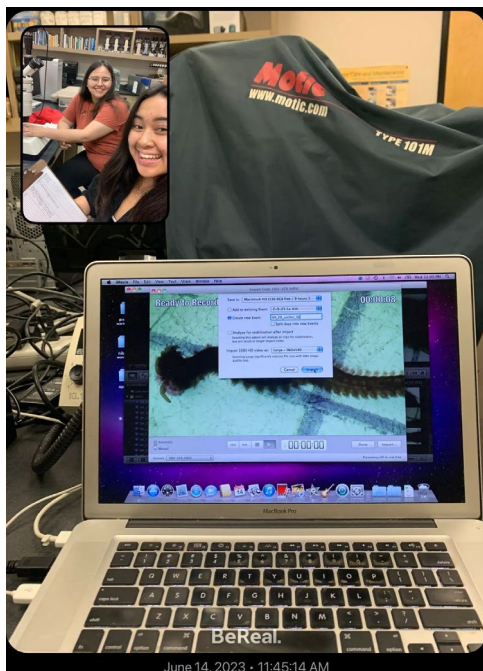


I have known that I wanted to go into the marine biology field ever since I was eight years old and saw a sea turtle for the first time in the ocean. My academic career was dedicated to getting into research and this summer, my dreams quite literally came true. Working here at the Coastal Marine Institute and Laboratory opened my eyes up to the world of research and so much more.

My first day in the lab, we jumped right into it. My mentor, Jessica Weidenfield, introduced my partner and I to her project which essentially studied the relationship between sea urchins and the worms that eat the urchin's feces. As a whole, we were all trying to better understand how nutrients cycle through the kelp forest ecosystem. It sounded super intimidating, but once we got to work my partner, Cassidy, and I realized that it was actually rather simple and incredibly interesting. The urchins were being fed two different diets: kelp and a feed called Urchinomics. We searched the urchins for worms and quickly realized that the urchins are really gentle and the worms are tiny but also cute! Even though we struggled to find the worms at first, we eventually got the hang of it. This was the hands-on experience that I had always wanted to have and it felt amazing to finally get a sense of what my future could look like in research.

Cassidy and I were also able to feed the worms which was oddly satisfying since we had to make sure their environments were clean before feeding them. This was the first step for us to grow an attachment to these little organisms. Once we put the worms under the microscope however, Cassidy and I could not stop exclaiming how their faces were adorable, which is funny to say about poop-eating specimens. I loved the technical part of this project where we were using equipment like the microscope because it allowed me to get a better understanding of the worms that we were working with. We could actually see their digestive system and how they contract their bodies which was beautiful in its own way, at least in my opinion.



Surprisingly, I thoroughly enjoyed the computer work that was also incorporated into the project. This was the first time I had used the application Fiji and I liked the process of retrieving the data of the widths and heights of the worm segments. The best part for me was when I got to input everything into R to get the volumes of the worms. I have already had experience with R because of my biostatistics class that I had taken, but I loved using it practically and actually getting meaningful numbers because of it.

Although the project is not finished, the data we collected tell us a lot more about the relationship between the worms and the urchins. It looks like the worms did better when the urchins ate kelp rather than the urchinomics feed, which may be indicative in a difference of carbon and nitrogen. We also found the best feeding method of feces was through fresh fecal matter rather than frozen since the worms eat more and are healthier when they consume fresh poop. There is still a lot to be discovered since there is not a lot of research out there on the relationship between the worms and urchins, but I am glad that I was a part of a project that is changing that.

This program has opened so many doors for me and allowed me to get a better understanding of what my future could hold. The career development workshops were also helpful and enabled me to look at the marine biology field in a whole new light. Thanks to the career panel that was held, I have started to look at careers and graduate programs that involve more policy rather than research. I realized that my passion for marine biology and politics could be combined in order for me to make the biggest impact that I could. The CMIL internship has given me so much experience and knowledge, which I will forever be grateful for.

