

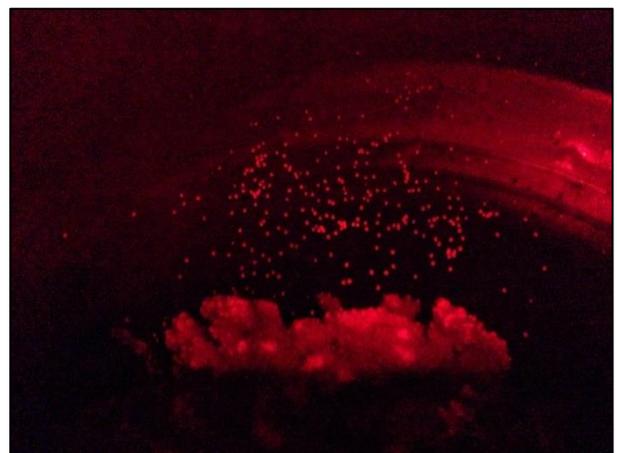
## Summer Placement Blog

### The Effects of Bleaching on the Reproduction of the Stony Coral *Montipora capitata* in Kane'ohe Bay, Hawai'i

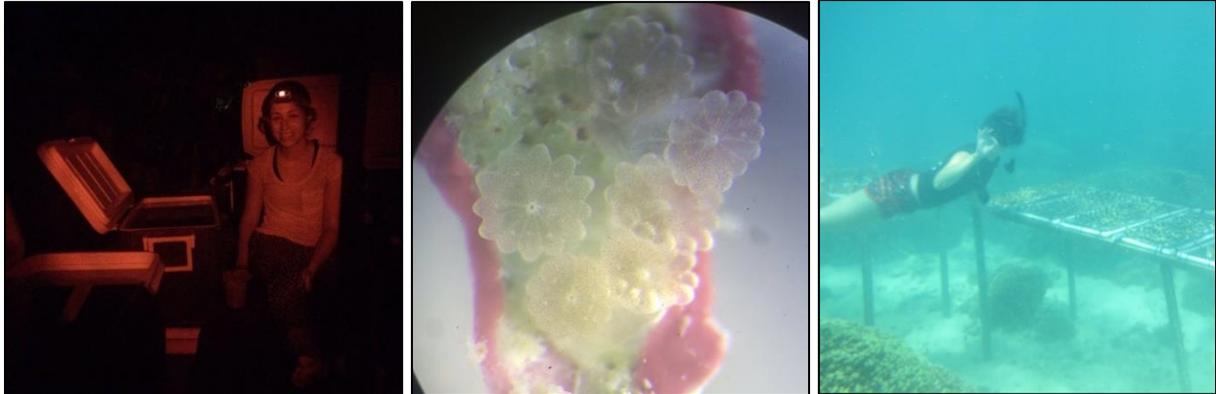
For my Summer Placement I was hosted by the Gates Coral Lab at the Hawai'i Institute of Marine Biology at Coconut Island. At this lab they look for solutions to the threats coral reefs are facing. They are focussed on finding biological traits which make one coral more resilient to stresses such as ocean warming and acidification than another. In the end they hope to breed 'super corals' which would be able to withstand climate change and could be used for reef restoration.

I was working with PhD student Beth Lenz who was looking at the effects of bleaching on the reproduction of the coral *M. capitata*. In the years 2014 and 2015 here have been bleaching events in Kane'ohe Bay. Some of the corals bleached while others didn't, and we wanted to see if this had affected their reproduction.

These corals spawn during the new moon in June, July and August at around 20:45 pm. Before the spawning event we collected the corals from the field and made sure everything was set up. During the spawning night we would collect all the egg-sperm bundles and made crosses of different parent combinations. For the gametes we looked at the number of eggs per bundle, size of the eggs, proportion of abnormal eggs and sperm motility. And for the crosses we looked at survival and settlement.



It was an incredible opportunity to work at the Gates Lab. Everyone is very passionate about their projects and will tell you all about it when you ask anything. We found some interesting results which was very exciting as well.



During this project I lived in the dorms at Coconut Island. It was amazing to stay in a place with so many marine biologists and meet all of them. We had BBQ's on Island almost every Friday night, which was a good place to get to know everyone under a relaxed atmosphere. I was able to explore the beautiful island of O'ahu during the weekends. O'ahu is a very good place for snorkelling, diving, hiking and enjoying the beautiful beaches. If you ever have the chance to visit Hawai'i, make sure you do!

