

PERSONAL STATEMENT

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Becoming a scientific researcher is so much more than simply learning ecological processes and writing papers. I came to this realization in 2017 when I interned for the Fisheries Division of the National Oceanic and Atmospheric Administration (NOAA). Here, I was first exposed to mathematical modelling, computer coding, and the world of quantitative biology as we modeled populations of the Aurora rockfish. I was able to write my first scientific paper and through this experience, I taught myself the statistical program R. This experience combined my interest in biology with my mathematical abilities, and showed me how biologists, economists, and industry workers all come together with the shared goal of fisheries conservation. I learned this job contained exactly what I want to with my career, and it felt amazing to have a concrete direction. But that's actually not the most important lesson I learned as a researcher that summer.

The field component to this internship provided insights in being a scientist as well. Every year, NOAA does a survey of the West Coast to quantify commercially fished stocks to set up next years' quotas. This meant scientists would work and live on a commercial fishing vessel for a few weeks alongside fishermen. I'd be lying if I said I wasn't anxious about sharing a living space with people who have a reputation of opposing conservation and a contempt for scientists. However, those notions of fishermen I had before the boat completely dissipated when I found myself among some of the most genuine, loving, and side-splittingly hilarious people I've ever met. We often talked about how fishing regulations directly affect their businesses, and how some laws had impeded fishing activity with unforeseen consequences for their community. They cited examples of gear requirements that hindered fishing activity or increased taxes that had almost put their boats out of business. I learned how complex environmental issues can be and that it's easy to approach conservation from an academic ivory tower, but it is much more difficult to really consider the humanity and needs of the people most reliant on these resources. This is essential to enacting meaningful environmental change, and something that scientists must consider when influencing lawmakers and stakeholders.

Ever since, I have tried to approach conservation from a more nuanced point of view and have always tried to engage with the people directly affected by environmental change. My first time living abroad is while studying in Costa Rica. Initially anxious, I found it to be one of the most meaningful experiences I've ever had. However, I realized I had spent my time with my fellow students from the US and had limited my ability to learn Spanish. I then returned to Colombia to truly learn Spanish and engage more fully in the people and culture that I was living in. Because of this, I was able to hear about the complications Colombia faces in the threat of climate change. The variously people I met had wide ranging views on how to balance this issue with economic growth and human rights, as well as how a history of colonialism had exacerbated the issues they face today. These were all conversations I would not be able to have without speaking the language. This lesson, the importance of engaging with people around you and learning all points of view on conservation, I will bring to Indonesia.

All these experiences have made me a better scientist. Not just because of the methods or math that I learned, but also the realization that each place has a unique combination of environmental and social issues that each country faces in the threat of ecological collapse, and addressing these complexities is the only way to write ecological success stories. I feel it is such a privilege to learn from all different perspectives on our relationship with the environment, and I would be humbled at the opportunity to return to fisheries research and learn about the complex and nuanced experiences of the people involved in Indonesia's fishing community.