LISA MUNGER | Independent Contractor and Research Affiliate/Lecturer at University of Oregon (lmunger4@uoregon.edu)

Degree: When, where, what, and what in?

I completed a PhD in oceanography at the Scripps Institution of Oceanography (SIO) in 2007. My dissertation was on passive acoustic monitoring of endangered North Pacific right whales (*Eubalaena japonica*) in the Bering Sea. I analyzed several years of acoustic data from seafloor-moored recorders to characterize the whales' seasonal occurrence and daily calling behavior. I also spent many months at sea on research vessels in Alaskan waters to conduct cetacean surveys, collect real-time acoustic data, and assist in deploying and recovering moorings, and I traveled to several remote native Alaskan villages to spend time in their communities and schools. Prior to my graduate studies, I completed a BA in ecology and evolutionary biology in 1999 at the University of Colorado, Boulder.

Did you stay in academia at all, and if so, for how long?

Yes, for a little over four years. I continued as a postdoctoral scholar at SIO for a couple years in my graduate advisor's lab, then moved to Hawaii for another two-year postdoctoral appointment, which was a joint position with the University of Hawaii and NOAA Pacific Islands Fisheries Science Center (PIFSC) in the Coral Reef Ecosystem Program.

How did you go about searching for a job outside of the university setting?

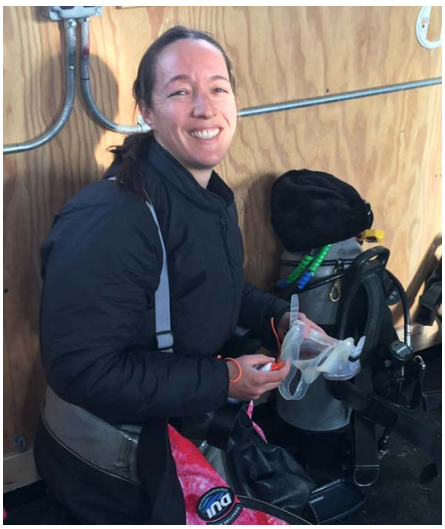
My postdoc in Hawaii allowed me to bridge the marine research communities at University of Hawaii and NOAA, and the connections I made led to some opportunities to remain there and continue working in my field. I worked for one year as a contractor within the Cetacean Research Program at NOAA PIFSC, and then as a senior researcher for several years for Oceanwide Science Institute (OSI), a nonprofit that focuses on marine bioacoustics research and outreach. In each case, I was more or less tapped for the position by the respective program leaders, who are friends and colleagues from grad school or a work situation. It was a combination of whom I knew and being in the right place at the right time with the right skills.

Is this the only job (post-academia) that you've had? If not, what else did you do?

In addition to working for NOAA and OSI, I also began teaching an undergraduate course at the University of Hawaii in 2012. I have taught this course nearly every year since then.

What is your current job? What path did you take to get there?

I'd say I'm now the oceanographic equivalent of a freelancer in the "gig economy." I keep a foot in the door of academia by teaching undergraduate courses at the University of Hawaii and the University of Oregon; these are part-time, temporary lecturer positions for which I am rehired each year. I recently returned from a three-month deployment as a research technician and scientific diver at McMurdo Station, Antarctica—another opportunity that arose sort of organically by getting to know researchers at the University of Oregon and discovering that my skills and training were a good (and timely) match for a project need. I held the title of Science Director for Oceanwide Science Institute for a year but am now transitioning to more of an independent contractor role, where I continue to pitch in on projects for OSI as needed, and I'm beginning to offer



my services in acoustic data analysis and reporting more widely.

What did your oceanographic education (or academic career) give you that is useful in your current job?

The ability to evaluate information and synthesize ideas from multiple sources and perspectives, whether reading scientific papers, browsing websites, or attending a meeting. Experience working in a wide variety of settings, often with limited resources, and often in tight quarters with the same people for extended periods—requiring lots of flexibility, creativity, and diplomacy to make things work. Being meticulous in all things—setting up equipment, troubleshooting, taking notes, organizing and backing up data, budgeting my time. Perhaps most importantly, a network of friends and colleagues that continues to grow. These people are so important for so many reasons—not just for finding jobs and opportunities, but also friendship, geeking out together, and providing support and encouragement!

Is there any course or other training you would have liked to have as part of your graduate education to meet the demands of the job market?

- Computer programming
- Electrical and/or mechanical engineering
- Business—management, communications
- Geographic Information Systems

Is the job satisfying? What aspects of the job do you like best/least?

I have always had many interests throughout my life and no single overriding passion, so on the one hand it is very satisfying to work on a variety of projects, either in parallel or by switching it up every few months. And I do find teaching to be immensely rewarding, and a challenge that I enjoy. The aspect of the job(s) I enjoy least is the "feast or famine" of working from one project to the next and not being assured of a steady income or benefits.

Do you have any recommendations for new grads looking for jobs?

As others have said, build up skills in a variety of disciplines. In my opinion, quantitative and engineering skills seem to be especially beneficial—there will always be a demand for tech-savvy folks who are good at making and troubleshooting things. Also, keep trying! It's tough out there, and most of your applications will be ignored or rejected. Stay positive, keep an open mind, and talk to everyone, whether they are in your field or not—you never know where a conversation might lead.