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CAREER PROFILES Options and Insights

SARA BENDER | Program Officer, Gordon and Betty Moore Foundation (sara.bender@moore.org)

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

I earned my BA in biology from Rutgers University in New Brunswick, New Jersey, and then worked for one year as a research technician before moving west for graduate school. I completed my master's and PhD degrees in biological oceanography at the University of Washington in Seattle. My PhD work focused on the effects of nutrient availability on the metabolism of marine diatoms.

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

After earning my PhD, I moved to the Woods Hole Oceanographic Institution for a WHOI Postdoctoral Scholar position. I was in the Marine Chemistry and Geochemistry Department, investigating how micronutrients impact phytoplankton physiology using proteomics. This postdoc was supported by the Cooperative Institute for the North Atlantic Region, and I collaborated with the Provincetown Center for Coastal Studies to conduct fieldwork in Cape Cod Bay. Overall, I was a postdoc for 18 months before starting my current position.

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

Much of my job searching was done through informational interviews, networking, and online searches. I used my online research as a way to determine what skills the positions I was interested in required, and then sought out opportunities during grad school and my postdoc to diversify and enhance my resume. I applied for several positions and heeded the advice, "Don't let your first interview be for your dream job." In the end, this advice was very helpful as it allowed me to get some of the "kinks" out before I interviewed at Moore.

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

This is my first post-academia position.

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

I am a program officer at the Gordon and Betty Moore Foundation in Palo Alto, California. I sit within the Marine Microbiology Initiative as part of Moore's Science Program. In this role, I work on a team to support scientific research in the marine environment through grant sourcing, grant making, and grants management. I spend about 30% of my time traveling to learn about the latest research in the field, to identify new potential project ideas, and to meet with grantees. I also spend a lot of my time communicating about possible research projects internally (primarily through writing and conversations), as well as working on a team to develop and implement strategy within the Initiative. My path was rather direct in that I transitioned from my postdoc to this position, just taking a week off to move across country.

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

My current job relies on my knowledge of ocean science and marine microbial ecology—expertise I developed during graduate school and my postdoc. I also take a scientific approach to identify new potential areas of opportunity, develop a clear plan of inquiry and investigation, conduct research and analysis, and then communicate my results to my peers. My early project management experience (e.g., finishing graduate school by successfully balancing timelines, coursework, publications, and research collaborations) gave me a solid background for



the grants management I do today. While a broken pump or failed experiment at sea may have frustrated me at the time, those experiences taught me the importance of organization, improvisation, creativity, and intuition—all skills I employ now.

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

The training I most benefited from was the courses and seminars I took in science writing and science communication. If I could go back and take additional training, I would consider courses on negotiation and influence as well as on operational finances. These are topics that frequently come up at my current position.

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

My job is incredibly satisfying because it allows me to keep one foot in research (albeit from a different perspective), while having the other foot in the funder space. Each day I am challenged to learn about new topics on the fringe of my expertise, and as part of this process, I get to interact with colleagues from completely different fields. These interactions are energizing as they expand my horizons and allow me to spend a lot of time in a creative and collaborative space. I entered graduate school because of my love for science,

discovery, and the ocean, and I have been fortunate enough to weave all of those passions into my day-to-day at Moore.

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

Of course.

1. *Put yourself out there.* Let people know you are interested in positions outside of academia

2. *Conduct informational interviews and network.* This will give you a sense for the types of positions you may want to pursue post-academia.

3. *Update your LinkedIn profile and get business cards.* These are currencies many sectors use for networking.

4. *Practice your elevator speech.* What are your skills and what excites you?

5. *Think outside the box and leave the*

“supposed to’s” behind. I have met hundreds of scientists since leaving academia who made a similar transition and are satisfied with their decisions—they hold positions in, for example, industry, finance, start-ups, and government. The career paths are endless. 🌐

DANNY RICHTER | Legislative Director and Director of Research, Citizens’ Climate Lobby (daniel@citizensclimatelobby.org)

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

I received my PhD in oceanography in June 2013 from Scripps Institution of Oceanography, University of California, San Diego. My thesis title was *Effects of Trace Metals on Diatom Export Products from the Euphotic Zone*. My original interest when entering grad school was in paleoclimate, and while my thesis was not directly related to that topic, I was seeking to answer fundamental questions regarding the biogeochemical cycles of nutrients important for understanding the climate system. I cultured diatoms, spiking their media with variable trace metal (Zn, Cu, Cd) loads, and seeing what quantities of those metals ended up in their hard and soft parts. I also looked at polyphosphate bodies, in particular how the amount of polyphosphate in the cell varied with variable metal load and with the cell cycle.

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

I did not stay in academia at all. I defended my dissertation in March 2013, took a month to travel in Europe, and then began my current job in April. I finished edits to my thesis in time for a June graduation.

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

I was fortunate to have been a volunteer with Citizens’ Climate Lobby for five years while completing my PhD, and I

was offered a position in Washington, DC, before I graduated. I did not have to search for a job—perhaps my situation is an example of the virtues of volunteering during grad school.

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

Yes, this is the only post-academia job I’ve had.

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

My current job is Legislative Director and Director of Research for Citizens’ Climate Lobby (CCL). I am primarily responsible for our US legislative strategy, keeping our volunteer lobbyists up to date with the latest legislative developments, communicating and harmonizing strategy with other nongovernmental organizations, researching arguments against our legislative agenda and developing counterpoints, ensuring our justifications are well researched, and communicating with researchers to produce studies that elucidate the impacts of our policy.

My path here is an interesting story. During grad school, I was a guide for the on-campus outdoor club, Outback Adventures, leading backpack, canoe, and kayak trips. As I was in the geosciences, I figured this kind of work could help me learn to organize and plan field trips (plus it was fun). During a break from helping with the Outback Adventures booth



at the 2008 San Diego Earth Day Festival, I came across the table for the then seven-month-old CCL. I took a brochure, and later invited their founder to give a talk to a group of grad students interested in the intersection of environmental science and policy. Though I did not intend it, the speaker gave a Group Start Workshop. I said “what the heck,” and started the La Jolla Chapter of CCL. It was the fifth or sixth chapter—we now have over 400 chapters made up of 70,000 individuals.

CCL leadership began sending me bills to read and asked for my opinion. They flew me to Washington, DC, for lobbying trips, involved me in the legislative advisory team, and of course, asked me questions about climate science. After five years of this, while the group had grown from ~100 people to ~2,000 people, they decided to hire me into my current position. I had no predecessor, and was only the fifth full-time hire for CCL, so much of what I ended up doing I had to figure out on my own.

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

Many things. I have found that the ability to parse journal articles is a skill that translates to reading economics, international trade law, and legislative texts. Certainly, the need to self-motivate and determine your daily priorities as a graduate student was great preparation for starting the DC office. The flexibility necessary to successfully conduct fieldwork has also been essential in adapting to a changing political landscape. Of course, the understanding of the climate system and its linkages to the ocean and the carbon cycle have come in handy several times, though it is not a day-to-day part of my job.

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

I have long thought that some sort of management or business training should be a part of graduate training. Professors are, after all, basically running a small business. If you are going to have your own lab, even basic training on how to manage employees (postdocs, grad students, lab

techs, undergrads) could probably avoid many of the common struggles grad students face. Similarly, as our DC office has now expanded from one to four people, I find myself in charge of others, and wishing I had such training.

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

I find the job immensely satisfying. There is no question in my mind that what we are doing is important work that no one else is doing, and that I am a key part of the success CCL has had. What I like most about the job are those times when I see one of our volunteers realize, for the first time, that he or she is a citizen in a democracy who can in fact influence the course of that democracy. Even before we had much in the way of legislative success, it was obvious to me that we were very good at taking otherwise disengaged people and empowering them to exercise their citizenship to its fullest extent.

What I like least about the job is the urgency of the issue. Our volunteers and staff understand well the threat of climate change. Usefully, as a result, they bring a lot of passion to everything they do. But, it can be draining to interact with that level

of passion day in and day out in a way that preserves their desire to act. Every mistake I make, they make, or our staff makes, real or perceived, can be seen as the single thing that will prevent us from saving the climate. Victories tend to be short-lived, as there is immediate pressure to do more.

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

Remember that the people you've been comparing yourself to are not normal, nor are the topics you generally talk about. When you get outside of academia, skills that used to seem average are suddenly extraordinary. Recalibrate your self-worth accordingly. Second, if you're interested in policy, having a PhD is very well respected, and I have found the perspective I bring is usually a fresh one. Third, remember that the useful skills you learn in grad school are not limited to how to run that instrument or your completely current familiarity with the literature. The ability to self-motivate, to determine your own priorities, a willingness to experiment, and the ability to parse through and find the meaning in dense technical language are all skills that translate well outside of academia. 📧



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Rebecca Tansley

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