THE OFFICIAL MAGAZINE OF THE OCEANOGRAPHY SOCIETY

Oceanography

CITATION

Career profiles—Options and insights. 2011. *Oceanography* 24(4):148–150.

CAREER PROFILES Options and Insights

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

I received my BA in geology from Colgate University (1997), then took four years off from school before returning to earn an MS (2003) and a PhD (2008) from the University of South Carolina, Department of Geological Sciences. My research is in the field of paleoceanography/paleoclimatology. More specifically, I have spent a lot of time thinking about tropical climate variability during the last glacial period and climate proxy calibrations.

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

Prior to finishing my dissertation, I embarked on a legislative fellowship in Washington, DC, through the John A. Knauss Sea Grant Fellowship program. Because I began the fellowship before officially finishing my degree, my advisor aptly named it my "predoc."

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

Working as a legislative fellow opened my eyes to a number of opportunities available to scientists outside of the traditional academic career. My first day in the US Senate coincided with the release of the IPCC Fourth Assessment Working Group I Summary for Policymakers as well as a hearing on scientific integrity. Wow—I got the DC bug quickly! Toward the end of my fellowship, I knew wanted to continue to work at the science/policy interface, but I also knew that I wasn't a scientist turned policy-maker. I focused my job search in the Washington, DC, area, looking into federal agencies, nongovernmental organizations, nonprofits, as well as for-profit businesses.

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

I currently hold a temporary faculty position at the United States Coast Guard Academy (USCGA) teaching oceanography and atmospheric sciences. Prior to this job, I worked at the National Academy of Sciences (NAS) for the Ocean Studies Board and the Polar Research Board. During my fellowship year in the Senate, I worked on climate and ocean issues with a focus on ocean acidification legislation. This work afforded me the opportunity to interact with staff at NAS where I learned more about the Academy's role in providing scientific advice to aid policy decisions. As my fellowship was coming to an end, an opportunity opened up at the Polar Research Board, where I happily began to work a few months later. I also never forget the jobs I had before going back to school. Those positions—teaching oceanography, working as a research assistant for geophysicists—have been essential in driving my academic and career path.

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

I recently took a leave of absence from the NAS to teach at the US Coast Guard Academy.

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

First, my education provided me with a broad knowledge of the Earth system. Working in the science-based policy world, I had to become a generalist and learn how to effectively communicate the basics of ocean and climate environments from the tropics to the poles to nontechnical audiences.

Second, it taught me how to think about the ocean and climate system in four dimensions, with the fourth dimension being time. During the years I spent picking away at foraminifera to reconstruct tropical ocean changes, there was increased attention in the media on modern climate variability (e.g., sea level changes, sea ice minima, extreme storms). My research has been incredibly valuable in understanding natural variability and the interaction of people with the physical environment.

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

At USCGA—absolutely. I have the opportunity to teach science again, and I am finding so many avenues for discussing the role of science in policy decisions. I also enjoy being in a mentor role and encouraging students to think about the ocean in four dimensions. What do I like the least? Well, every classroom will have some sort of disruption—it's college!

At NAS—absolutely. I am constantly learning how science can inform decisions in different ways and from so many different people whose backgrounds and perspectives vary greatly. Great debates in committee meetings are always energizing, just as long as everyone can come to consensus at the end of the day. What do I like the least? Vague institutional policies. I also miss scientific research.

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

Don't be afraid to go outside your comfort zone. I didn't even know I liked policy until I showed up in Washington, DC. Also, take advantage of learning from your mentors. Find at least one if you don't have any!

LYNN ABRAMSON | Senior Legislative Assistant, Office of Senator Barbara Boxer (lynn_abramson@boxer.senate.gov)

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

I completed my PhD in marine and atmospheric sciences at Stony Brook University in 2007, specializing in organic geochemistry. For my dissertation, I primarily focused on using biomarkers to compare the extent to which different types of marine particles disaggregate vs. remain intact during transit through the water column, with the goal of better understanding how the source of organic matter affects the efficiency of the biological carbon pump. I also looked at how interactions between biominerals and organic matter affect organic matter decomposition.

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

No, I left academia immediately after finishing graduate school, and started in my current office about one month later. I did, however, have the opportunity to teach several courses during graduate school, so I got to experience a little bit of what it would have been like to continue my career in an academic setting.

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

About halfway through graduate school, I started to realize that I didn't want to stay in academia forever. I really enjoyed my research and teaching, but over the long term, I wanted to do something outside of pure scientific research. I wasn't sure what that was, until I heard about the John A. Knauss Marine Policy Fellowship. This fellowship is sponsored by the National Oceanic and Atmospheric Administration (NOAA) Sea Grant Program, and provides an opportunity for graduate students or recent graduates to spend one year working in the legislative or executive branches of the federal government on science policy issues. It sounded like a really exciting opportunity to apply my background in environmental science to public policy issues. During my last year of graduate school, I applied to the program and was accepted as a legislative fellow. After an intensive week of interviews designed to match fellows and prospective offices based on their mutual interests, I landed in the office of Senator

Barbara Boxer (D-CA). It was a perfect fit, and I had an amazing fellowship year. Toward the end of the year, my office offered me a permanent position, and I enthusiastically accepted.

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

Yes, this is the only job I've had since completing graduate school.

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

My current position is Senior Legislative Assistant for natural resources, energy, and transportation issues. I started with

a limited portfolio as a fellow, which gradually grew to encompass more issues and responsibilities. For my fellowship year, I primarily worked on ocean issues, with some occasional work on public lands issues (e.g., National Parks, National Forests, wilderness). When I became a legislative assistant the following year, I took on all public lands issues, water resources (e.g., municipal water supplies, irrigation, flood control), and appropriations for the natural resources agencies (e.g., Environmental Protection Agency [EPA], Army Corps of Engineers, Department of Interior, NOAA). When I was promoted to Senior Legislative Assistant this past August, my portfolio expanded to include energy and transportation issues.

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

During graduate school, I took courses in a broad variety of fields—including oceanography, energy, and environmental law—which have provided useful background for many of the issues I work on today. However, even more importantly, my education trained me to think critically and objectively. I learned to not rush to judgment, but rather to carefully weigh my observations before reaching a conclusion. Now, when I meet with stakeholders and interest groups with widely diverging opinions on various policy issues, my training helps me carefully distill all of this information and provide a balanced perspective to Senator Boxer.

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

Yes, it is a very satisfying job. One of the things I love most—and least—about my job is the pace. I love working on a wide variety of issues and constantly learning something new. Every day is an adventure, and I am never bored! However, it is always so busy that I sometimes feel stretched thin. On days when I am frantically running from one meeting to the next while trying to track recent developments and prepare a memo to Senator Boxer, I sometimes think it would be nice to be just a tiny bit bored. Also, as anyone reading the news these days can tell, Congress can at times be a divisive place where there are strong differences of opinion among Members—and that can be a challenging environment in which to work. However, when we are able to work out a solution, it is incredibly rewarding. When legislation is passed that I have worked on, or when my boss has a successful hearing that addresses an important issue, or even when a simple letter or phone call helps solve a problem some constituents are having, it is extremely gratifying to know that I have helped make a difference.

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

If you have any interest in environmental policy, I would highly recommend applying for a policy fellowship such as the Knauss, American Association for the Advancement of Science (AAAS), or Presidential Management Fellow programs. They require only a one- to two-year commitment, so even if you decide you want to go back into academia, you would not really be taking much time off from that field. Several of my friends in the Knauss program went back into academia after completing the fellowship. Also, if you do decide to continue in the policy field, these fellowship programs are a wonderful opportunity to get your foot in the door. For most programs, it isn't often possible to remain in your host office after completing the fellowship (I was lucky that there was such an opportunity in my office), but the experience you gain is highly transferable to other positions. My fellowship was in the legislative branch, but there are also a variety of positions in the executive branch working for federal agencies like NOAA, EPA, or the Department of the Interior. Alternatively, if you are ineligible for one of these fellowship programs, or if you wait several years to enter this field after completing graduate school, there are many positions in the executive branch and in advocacy organizations for scientists with advanced degrees. Positions in the federal agencies are advertised on http://www.usajobs.gov, and many advocacy organizations advertise on their own websites. The job market is tough right now for everyone, but be persistent and eventually you will find something. Most importantly, keep an open mind, and don't hesitate to apply for an intriguing opportunity.

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