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

I received a bachelor of science degree in geophysics in 2005 from Florida State University and a PhD in marine geology and geophysics in 2011 from the Lamont-Doherty Earth Observatory of Columbia University.

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

I stayed in academia for about three years after I graduated from Columbia University.

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

I networked and talked with as many people as I could about job opportunities outside academia and about their own career paths. Discussions led to introductions to others, and that networking system perpetuated so that I started to get to know a lot of people. I went to trade conferences, like the Society of Exploration Geophysicists annual meeting, with business cards and talked with as many companies as possible. I became involved on a volunteer basis with other projects so that I could keep my options open.

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

This is the first "real" job I have had outside of academia.

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

I currently work as a project associate at the Incorporated Research Institutions for Seismology (IRIS). The IRIS Consortium is a federally funded nonprofit seismology facility with colleges and universities as its voting members. I work in both the Instrumentation Services and Education and Public Outreach divisions of IRIS. My

primary projects with Instrumentation Services are the Central and Eastern US Seismic Network and the Global Seismographic Network. My primary projects with Education and Public Outreach are the Early Career Investigators group, the Quake-Catcher Network citizen-science project, and developing field experiences for undergraduates.

After earning my PhD, I began a National Science Foundation (NSF) Postdoctoral Fellowship at the United States Geological Survey (USGS) in Pasadena, California, and at the Southern California Earthquake Center (SCEC) of the University of Southern California in Los Angeles. As an NSF postdoc, it was very important to me to produce research that advanced the field, and participate in and produce resources for all levels of formal and informal education. Thus, I conducted research with the USGS and pursued education opportunities with SCEC. During that time, I also became involved as a leader in the IRIS Early Career Investigators group. Through interactions with this group, IRIS staff had an opportunity to watch me grow and develop through my postdoctoral experiences, so that when an employment opportunity arose, I was notified.

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

Oceanography and marine science in general are very cross- and interdisciplinary. The techniques and skills that I learned through my research and education can be translated quickly and efficiently, whether they are applied to marine science or to other scientific aspects. As a marine geology and geophysics student, I learned about seismology, hydrology and hydrogeology, thermodynamics, and rock mechanics, among others disciplines. My dissertation



focused on the mechanics and triggering of earthquakes in both mid-ocean ridge hydrothermal and transform fault settings. I had to learn about seismology and fluid flow, and their interactions. Thus, when I began my postdoctoral fellowship and started to work on wastewater injection induced seismicity in Oklahoma, I could translate my knowledge of fluids and rock mechanics to a completely different environment.

In my current job, tasks move rather quickly, and I have to apply my scientific knowledge and my written and verbal communication skills to myriad tasks on a daily basis. In any one day, I could work on early career related tasks, jump to analyzing instrumentation noise, and then help to facilitate a workshop. My multi- and interdisciplinary background allows me to switch tasks pretty regularly without losing momentum.

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

Overall, I find my job satisfying. The best part is that I get to participate in and interact with the seismology community at large. There is constant and consistent interaction with the community through workshops, conferences, and events. The intellectual stimulation from networking with such a diverse group of people is highly valuable. On the flip side, since I

am split between two directorates within IRIS, I can sometimes find myself either spread too thin because there are too many tasks at one given time, and during other periods, rather lonely because a group is out of the office or there are no pressing tasks. The ebb and flow of the academic school year creates a cyclic nature to the job that can sometimes be difficult to handle. Time management is essential.

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

Network, network, network! Speak with as many people as you can, and have your 20-second “elevator” speech ready so that potential employers get a glimpse of what you do without being overwhelmed. Also, lots of graduating PhDs have many marketable skills outside of academia, but a resume needs to have a different pitch for pursuing nonacademic career tracks. For instance, though certain prospective employers may not be particularly interested in the specifics of how many publications you have or how many talks you gave at conferences, they may be encouraged to know that you have excellent written and communication skills and that you can lead an independent project.

Was there anything missing from your graduate education or that you would have liked to have more of?

As a graduate student at a research-heavy academic institution, I would have appreciated more opportunities to gain exposure to careers outside of academia and even outside the oil and gas industry. Research institutions tend to have myopic views of the opportunities that are available to graduates. I am especially proud to work with the IRIS Early Career Investigators group so that I can compensate for that—expose graduate students to the realm of opportunities that lie outside academia! 🌐