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# Oceanography

## CITATION

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# CAREER PROFILES Options and Insights

**AARON GOLDNER** | Energy Policy Advisor, Office of Senator Sheldon Whitehouse  
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## Degree: When, where, what, and what in?

I began my undergraduate work in accounting and business at Oregon State University (OSU), but quickly realized that I was more interested in environmental science. After meeting with several professors across different departments and seeking advice from friends, I switched my degree to Earth and environmental sciences. At the time, Oregon State was starting up a new undergraduate program that allowed students to take a variety of Earth science classes, essentially allowing students to build their own majors in this field. I did not know at the time what I wanted to specialize in, so I took classes in geology, atmospheric science, oceanography, and biology. By enrolling in a diversity of classes, I learned more about how humans influence our climate and began to focus on this issue. This led me to undergraduate research at OSU's ice core laboratory, where I learned how to analyze ancient ice cores to quantify how humans were increasing greenhouse gas emissions in the atmosphere, creating an undeniable fingerprint on our climate.

This work eventually led me to graduate school at Purdue University, where I earned my PhD in climate modeling and atmospheric sciences. My thesis focused on understanding what forcings were critical in altering past paleoclimate time periods and whether the scale of these forcings could be quantified to better predict the effects of climate change.

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

I finished my PhD in the summer of 2013 and was choosing between a postdoctoral fellowship and a Congressional Science

Fellowship in Washington, DC. My initial thought was that I would do one year on Capitol Hill and return to academia in some form, after getting some practical policy experience. This turned out to not be the case; after my initial Hill fellowship, I decided to stay in Washington, DC, and pursue the climate/energy policy track.

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

During the last several years of my PhD, I sought involvement with projects and people outside my field of expertise. Meeting individuals for coffee to discuss their career paths, I was surprised by how many of them, even within academia, had not followed traditional academic paths. Through these different interactions, I soon became involved in initiatives outside the confines of my PhD research. The hardest part of this process was making time to have these conversations and work on projects that were not directly affiliated with my PhD work.

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

Once I finished my Congressional Science Fellowship on Capitol Hill, several doors opened for me in DC. I decided that a logical next step was to get experience in climate/energy policy in the Executive Branch of the US government. I was lucky to land a position at the Department of Energy in the Office of Energy Policy and Systems Analysis. This group did analytic energy modeling to help inform regulatory decision-making related to rules and regulations that the Obama Administration was rolling out for its Climate Action Plan. I got involved



in cross-agency dialogues on how to best implement regulations to reduce greenhouse gas emissions consistent with our Paris climate goals.

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

After completing a fellowship on the Hill and then at Department of Energy, a permanent position opened in the office of Rhode Island Senator Sheldon Whitehouse where I did my Hill fellowship. I threw my name into the hat and was lucky enough to get a full-time position back on the Hill.

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

Writing skills and critical thinking—working on academic papers and being able to understand technical scientific ideas is actually a transferable skill into the policy world. Everything is about writing and being able to communicate the points to the right people and doing so in a way that is intelligible.

If you get into policy work, you will find that the writing skills you developed will be essential in your ability to communicate with policymakers. Another key skill is being able to read and digest complicated scientific findings and



## Graduate Student and Early Career Resources

<https://tos.org/opportunities>

The Oceanography Society has created a web page with resources relevant to ocean sciences graduate students and early career scientists. This portal contains links to information on jobs, fellowships, scholarships, and ship time/fieldwork opportunities, as well as links to useful articles. New resources are added regularly, so please be sure visit this site often!

## Oceanography Student News

<https://tos.org/opportunities>



Have you read the latest issue of Oceanography Student News? Each newsletter includes a regular column by the student representative to the TOS Council, profiles of TOS student members, information about student activities related to TOS-sponsored meetings, and links to relevant student resources and articles in *Oceanography* magazine. Feel free to forward the links to the newsletters to other students, or print out a copy and post it on your department bulletin board. Any questions? Email TOS Student Rep Stefanie Mack at [studentrep@tos.org](mailto:studentrep@tos.org).

## Check Out Our Career Profiles Page!

<https://tos.org/career-profiles>

In each issue, *Oceanography* magazine publishes "career profiles" of marine scientists who have pursued successful and fulfilling careers outside of academia. These profiles are intended to advise ocean sciences graduate students about career options other than teaching and/or research in a university setting. They also include wisdom on how to go about the job search.

We have over 50 profiles of ocean scientists on our web page.

**Check them out!**

### Do you have suggestions on who to profile?

Please send their contact information to [ekappel@geo-prose.com](mailto:ekappel@geo-prose.com). Self-nominations are accepted.

packaging them in a form that appeals to an audience that may not have any science background.

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

Early on in my undergraduate work, I read the reports and saw the signs that climate change was happening, and happening in my lifetime. I like being able to wake up in the morning and know that I am heading to a job where I am working to help solve this problem. Although the pinnacle of this work would be to pass comprehensive climate change policy, there is a lot that has to be and will be done in the meantime to push policies and highlight priorities in the media to move the dialogue forward.

We surely live in a divisive time. The politicization of science and the attacks on facts are probably the most tiresome parts of the job, but it's also another example of the need for scientists to engage in policy. This is especially important when a scientist's work comes under direct attack.

I do believe, and have seen firsthand, that most policy staff and policymakers have a deep respect for scientists, even though it may not appear to be the case.

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

My experience affirms that you never know who you are going to run into if you don't reach out. This includes both people at the university and in surrounding communities. Many universities are surrounded by a town or a city where there are endless opportunities to start dialogues with people you would never meet in class or the lab. People like to tell their stories and how they got where they are. So get outside your comfort zone and start inviting people for coffee and to have those conversations. Even if it helps you figure out what you don't want to do, no enlightening conversation is wasted, and you would be surprised how small policy and science circles really are. 🌐