

MARTHA C. McCONNELL | US Coast Guard Academy ([martha.c.mcconnell@uscg.mil](mailto:martha.c.mcconnell@uscg.mil))

**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 I wanted to continue to work at the science/policy interface, but I also knew that I wasn’t a scientist turned



policymaker. 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! 📧