

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

At Southampton University, where I pursued an undergraduate degree in marine sciences, I focused on physical oceanography, and ultimately satellite oceanography, for my honors project, looking at patterns of large-scale air-sea interaction in scatterometer winds and sea surface temperature (SST) data. Based on this work, I was able to be first author for a paper on Rossby wave propagation in SST!

After finishing my degree, for about 18 months, in between substantive traveling and sailing, I did some contract work at Southampton for the Natural Environment Research Council. During my travels, with a set of acetate slides in my backpack, I looked for an interesting place to do further studies and ultimately signed up for a master's degree program in climate dynamics at the University of Victoria, Canada. There, I examined changes in the Sea of Okhotsk over 50 years using hydrographic data. I had a great time living on the west coast of Canada-but didn't enjoy the endless number crunching the project required.

I decided that perhaps research was not for me, and looked into science writing and communications opportunities. After returning to the UK and dabbling in a bit of watersports broadcasting (filming and local radio for sailing events), I took a job in science coordination. I then realized that if I wanted to lead programs, I needed more science credibility so went to Hobart, Australia, to join the Quantitative Marine KATY HILL | Scientific Officer for the Global Climate Observing System and the Global Ocean Observing System, World Meteorological Organization (khill@wmo.int)

Sciences PhD program (a joint University of Tasmania-CSIRO program). My PhD project, which focused on drivers of variability in the East Australian Current, provided a great opportunity to connect up a story from hemispheric to gyre scales, to the East Australian Current, and then to work with biologists to see how changes affected ecosystems.

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

I largely had just short-term contracts as a research assistant between studies. I realized early on that I enjoyed the people side of science and connecting up the bigger picture, and that my strengths would be best focused on coordination of science rather than on the science itself.

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

While pursuing my academic degrees, I was fortuitously based in collaborative institutional environments, where a university and a government research agency were working together. This exposed me to a broader range of options while still working in the public sector. The World Ocean Circulation Experiment was coordinated in Southampton when I was there, and that really caught my imagination.

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

I have had a number of national and international coordination positions. I was a staff scientist for the international CLIVAR project office in Southampton between my master's and PhD degrees, then after my PhD, I worked as Scientific Officer for Australia's Integrated Marine Observing System in Hobart.

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

As Scientific Officer for Ocean Observations at the World Meteorological Organization, I work with the Intergovernmental Oceanographic Commission and through a number of programs to develop and improve sustained ocean observations: the Global Climate Observing System, the Global Ocean Observing System, the World Climate Research Programme, and the Joint WMO-IOC Commission for Oceanography and Marine Meteorology. I have largely taken science coordination roles with increasing responsibility and complexity. Working across four intergovernmental programs and two intergovernmental organizations is probably the pinnacle of complexity!

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

I've needed a strong background in oceanography throughout my career. My current job largely focuses on connecting things—people, ideas, projects, energy so the ability to think laterally is a big plus. When I worked in Australia, engagement across a broad range of organizations and government portfolios helped me to understand and leverage institutional priorities. In addition, I have found mentors crucial in navigating a nonstandard career trajectory.

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

Presentation skills, proposal writing, and project management are essential in both academia and program coordination but are not taught formally. It would be great to have development of these skills embedded in graduate programs along with engagement, negotiation, and chairing/facilitation, rather than leaving them to be learned by doing.

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

I am fortunate to work with a dynamic international community of scientists. The exciting part of this job involves identifying the locus of energy in the community, and opportunities for making progress on particular issues. Of course, working within the intergovernmental world can be bureaucratic and slow moving, and there will always be boulders to push uphill, but some things just need to be pushed forward slowly. There are also opportunities to make significant progress, for example, when the energy in the community aligns (when the need is clear, the scientists are interested, and funders are engaged). The skill is in determining where to engage the intergovernmental machinery to help things along (that is, fostering international consensus or agreements between groups of nations) and running activities and projects at a grass roots level within the community when it is more appropriate.

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

Identify mentors throughout your career' who are in roles that you aspire to and people you respect. Ask them if they would be willing to mentor you by helping you foster a professional network, and also advising on "soft skills" such as chairing, engagement, and negotiation—the things you are not taught!