

LOUISE NEWMAN | Executive Officer, Southern Ocean Observing System, newman@soos.aq***Degree: When, where, what, and what in?***

For my undergraduate degree (1997–2001), I was a double major in zoology with honors at the University of Tasmania, Australia. In 2003, I started my PhD, also at the University of Tasmania, Australia. My dissertation focused on the paleobiogeography of the freshwater fauna in Antarctica. For this research, I collected sediment cores from a number of freshwater lakes in Antarctica, and used zooplankton microfossils preserved in the sediment to reconstruct changes in the lacustrine ecosystem through time, predominantly over the last 10,000 years BP, but in one region stretching back ~130,000 years BP. The key finding of my research was that many freshwater species in eastern Antarctica survived the Last Glacial Maximum in lacustrine refuges—and did not colonize the continent from more northerly landmasses after deglaciation, as previously thought.

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

I managed to keep some level of research going for a number of years after my PhD. My first job post-PhD was 80% contact hours, so I took an honorary research associate position at the University of Bern, Switzerland, to continue my research one day a week. The limited time available meant it was difficult to run my own research projects, but I spent my time co-authoring papers and research grant proposals.

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

With about six months to go on my PhD, I started looking at international job-seeking websites. I knew that I wanted to get experience working outside of Australia, and I was also interested in positions that were not necessarily pure

research, but still relied heavily on the knowledge that I had built throughout my university education. I saw a job advertised for Science Officer of PAGES (Past Global Changes), an international initiative that coordinates and promotes past global change research toward improved understanding of past changes in the Earth system. The position required a PhD in a field of paleo science, as well as an interest in science communication and coordination. I had limited experience in the latter but applied anyway. I was actually very lucky to get this job, as I had not finished my PhD at the time and had limited experience outside of this. I was interviewed while in Antarctica as a field assistant, so I had to do the interview via satellite phone. I was offered the position, and within three months had moved to Bern, Switzerland! It was a steep learning curve, and I had to finish my PhD on the weekends, but it was a fantastic group in the PAGES International Project Office (IPO). The IPO had only five staff, and my position cut across many aspects, from coordination and communication to Web content, strategic planning, and scientific editing, so I very quickly built up my experience across a broad range of activities.

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

My position as Science Officer at PAGES and the parallel honorary research associate position at the University of Bern are the only jobs I have done post-PhD, other than my current position.

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

I am currently the Executive Officer of the Southern Ocean Observing System (SOOS; <http://www.soos.aq>). SOOS is an international initiative of the Scientific Committee on Oceanic Research (SCOR)



and the Scientific Committee on Antarctic Research (SCAR). SOOS aims to facilitate the collection and delivery of essential observations of the Southern Ocean that are required to address key societal challenges, such as those relating to sea level rise, climate change, and marine resources. I run the SOOS International Project Office (IPO), which is based at the Institute for Marine and Antarctic Studies, University of Tasmania, Australia. My position as Science Officer for PAGES provided me with broad skills across many aspects of international science coordination, and I find all of these skills useful in my current position. The IPO for SOOS has only two staff, so my position includes duties ranging from strategic development, organization/running of meetings and workshops, maintenance of the SOOS website and all communication products, engagement with stakeholders, and maintaining/enhancing funding and sponsorship, as well as general administration.

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

Much of my undergraduate training was focused on marine ecosystem science, but I gained broader oceanographic experience through numerous part-time research and field tech positions that I

held alongside my university education. There are many aspects of my education and work experience that are beneficial to my current job. Although I am no longer running my own research projects, a significant part of my current position involves advocating for oceanographic research and observations, so I need to have a good understanding of the science I am supporting. Experience in writing publications and funding proposals, giving presentations, and generally building networks has been very useful.

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

Clear communication of science has become increasingly important, and I would have liked some level of education on this front, as part of a scientific undergraduate course.

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

I love my job, and I think to a large extent it is because I believe in the importance of what the organization is trying to achieve. The best thing about my position is also the worst; it is very varied. To some degree, I can choose each day what I feel like doing, whether it be website content, writing a paper or report, drafting a funding strategy, or balancing the budget. I love that I get to meet and work with people from all around the world, and I also love that I am supporting cutting-edge science on a daily basis. However, the broad requirements of my position also make it difficult to focus solely on priority activities, because there are always other things that also need to be done. It is very difficult to support the growth of SOOS to the level required, when the capacity I have in my position is really only enough to sustain SOOS as it is now. From a positive viewpoint, this is because SOOS has become successful enough to now need more IPO staff to support it, and if we can

work over the next few years to get the funding and support necessary for this, then I look forward to growing my own leadership and management experience.

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

I think there are two key things I have inadvertently learned through my career so far. First, it is very important to have as broad a skill base and as wide experience as possible. I believe that one of the big reasons I got the job as Science Officer at PAGES was because of the many extra jobs and volunteer science work (e.g., as laboratory or field assistant) I had done in my spare time during university (mainly for economic reasons at the time). In the years since then, I have sat on numerous interview committees, and I believe that people who have experience beyond their university education generally have broader networks and greater skill bases that may not be directly relevant to the job they are applying for but that demonstrate personal initiative and drive. This extra experience also tends to increase co-authorship of publications and proposals, and in my experience, can also lead to new opportunities.

The second thing I have learned is the importance of personality. Perhaps this is an obvious statement to many, but through the process of hiring people that I will then have to work with, I came to realize that in most cases if you get asked to an interview, then you generally have the qualifications...on paper. What it then comes down to is whether you have the personality to fit into the team. Of course, there might be requirements of the position that you do not have experience in, but if you can demonstrate your ability to learn and adapt and that you are a motivated individual, and if you can communicate this to the interviewers (with eye contact, concise examples, etc.), then I believe this makes an enormous difference. ☺