

TURNING POINT

Tracey Holloway

More than ten years ago, Tracey Holloway and her colleagues started what has become the 1,700-member Earth Science Women's Network. Now an air-quality and energy researcher at the University of Wisconsin-Madison, Holloway is helping to turn the network into a non-profit organization.

Did you have early intentions to pursue a science career?

No. In fact, a school friend who believed that women self-select out of science made me realize that I may have been doing that. I kept an open mind and found that I liked chemistry and maths as an undergraduate more than I had as a high-school student. After my first year, I spent a summer internship at the Johnson Space Center in Houston, Texas, and realized that I could use fluid dynamics to look at hurricanes, global warming and air pollution. That put me on track for a graduate degree in atmospheric sciences at Princeton University in New Jersey.

Describe the gender dynamics during your graduate experience.

When I started, there were only ten graduate students across all years. There were a couple of women in my first year, but for a while after that I was the only woman. The faculty were all men.

Did your PhD go smoothly?

I didn't find a project I felt passionately about in the first year and wondered whether I had made the wrong choice. In fact, I asked the department chair for a leave of absence. He told me I had to send a letter to each faculty member explaining what I'd do during the year off, and the response was surprising. They were very supportive, and several talked to me about my interests in policy and law. At that time, Princeton had started a programme through the Woodrow Wilson School of Public and International Affairs that allowed science students to do a policy-relevant project, so they encouraged me to go down that route.

When did you start the Earth Science Women's Network?

During graduate school, several women colleagues and I hosted a session at the American Geophysical Union (AGU) in Washington DC on policy-relevant science. After the session we talked about our careers, spouses and work-life balance, and we realized that we wanted to stay in touch beyond these meetings. It started out with six of us on an e-mail



list, but it quickly grew into what we described as a peer-mentoring network of 25 members, so we set up an electronic mailing list. Over time, the network received financial support from the AGU, the US National Center for Atmospheric Research in Boulder, Colorado, and the US National Science Foundation in Arlington, Virginia.

Was there any backlash against forming a women-focused network?

No, but we were always very aware that it could be perceived as sexist. That's one reason why, early on, we split off a jobs network to serve the entire early-career community. But we built this network to have conversations that weren't happening elsewhere, and it clearly served that role.

Why the move to become a non-profit?

Until last year, we had support from universities, but the funding expired. We were trying to figure out how to move forward, and becoming a non-profit seemed like the best move to cover our expenses. But it costs money to start a non-profit, so we launched a crowd-funding campaign on Crowdfunder in January. It's been really inspiring to see the support that came back. We've raised just shy of US\$14,000 from roughly 300 contributors.

What impact has this network had on your career?

I think it's made my career experience more satisfying. The women in this group are my closest friends because I'm able to connect with them in all facets of my life. We talk about research one minute and our kids the next. I've found that I've got the best advice from people at or near my career stage. ■

INTERVIEW BY VIRGINIA GEWIN

ACADEMIA

Dwindling tenure posts

The proportion of non-tenure-track and non-tenured faculty posts continues to rise across all US institutions, finds a report by the American Association of University Professors (AAUP) in Washington DC. *Losing Focus: The Annual Report on the Economic Status of the Profession, 2013-14* surveyed 1,159 public and private US institutions and found that the overall proportion of assistant professors in non-tenure-track posts was 23.4% for 2013-14, compared with 20.8% in 2010-11. Dwindling tenured and tenure-track posts threaten the ability of scientists to conduct research without interference from funders or administrators, says John Curtis, the report's lead author and director of research and public policy for the AAUP.

FINANCES

Student debt rising

Education debt owed by US holders of master's degrees in science is snowballing, says a report from the New America Foundation, a non-profit public-policy group in Washington DC. Half of the graduates owed at least US\$36,000 in 2012, up 28% from 2008 levels. One-tenth owed \$92,126 or more, up 36% from 2008. The proportion graduating with debt rose by almost 8%, to 53.6%, between those years. *The Graduate Student Debt Review* examined data that the US Department of Education collects every four years. Report author Jason Delisle speculates that the increasing indebtedness will eventually spur government-led loan-forgiveness programmes.

FUNDING

Grant obstacles

Tough grant-proposal deadlines can have severe impacts on researchers, according to an Australian study. The authors surveyed 215 academic researchers across all career stages in Australia who prepare annual applications for project grants from the National Health and Medical Research Council (D. L. Herbert *et al. Br. Med. J.* 4, e004462; 2014). Most respondents reported that the 2-3-month application process each year takes top priority, superseding research and publishing, their health and their personal responsibilities. Almost all said that they would support adding more grant cycles and deadlines to lessen the burden for applicants.