

creativity. Many of the students “haven’t been trained so much in using their knowledge to generate new ideas and find new solutions”, says Danielsen. “They work extremely hard and very long hours, but I am not sure whether they are able to step back a bit and reflect on the results.” Wickham says that the science is often highly managed by professors, and researchers are not encouraged to take risks or learn from their mistakes.

#### A DIFFERENT WORLD

Foreigners may find that some practices are anathema to their usual customs. Most academic institutions in China offer financial rewards for getting papers published in journals with high impact factors — often thousands of dollars for the first and corresponding authors (see *Nature* 441, 792; 2006). Such policies threaten to make competition unhealthy and discourage people from working together and exchanging ideas, says Sarah Rothenberg, an environmental scientist who has just joined the University of South Carolina in Columbia after three years at the CAS Institute of Geochemistry in Guiyang. “Science has become a totally different game there,” she says.

Despite the differences, all the researchers contacted for this article say that their Chinese colleagues went out of their way to make them feel welcome and help them to sort out logistical issues such as housing. The country’s ample research funding also helps. “There are problems with money everywhere but China,” says Chanfreau. “I was often told, ‘Money is not a problem, just get what you need.’”

Some foreign postdocs have taken the opportunity to experience Chinese culture outside their research. Chanfreau, for instance, helped to initiate an EU–China science-communication project in Beijing, akin to the international *Café Scientifique*, in which researchers and the public meet to debate topical issues such as green chemistry, breast cancer and genetic engineering. “The sense of being able to contribute to the public understanding of science in China is extremely rewarding,” says Chanfreau.

The postdocs who find success will be those who are open to a new environment and eager to explore different approaches to science. “A sense of humour and the willingness to be flexible are crucial,” says Corwin Sullivan, a palaeontologist who went to China to pursue a postdoc at the CAS Institute of Vertebrate Paleontology and Paleoanthropology in Beijing in 2005 and is now an associate professor there. “The expats who find China most difficult are those who have a rigid sense of how things should work and refuse to adapt.” ■

**Jane Qiu** is a freelance writer based in Beijing.

## TURNING POINT

# Rob McKay

*Rob McKay, a glacial sedimentologist at the Victoria University of Wellington in New Zealand, won the 2011 Prime Minister’s MacDiarmid Emerging Scientist prize in December for research on Antarctica’s climate and environmental history.*

#### Why did you leave science after completing a master’s degree in geology?

I did my master’s with Peter Barrett at Victoria University. I went on my first trip to Antarctica with him, and I really enjoyed being in the field. But after I finished in 2000, I had hefty student loans and decided to make some money and see the world. I ended up in the United Kingdom, using the critical-thinking skills honed during my graduate research to edit research reports at an investment company.

#### What lured you back to do a PhD?

I had kept in touch with Peter, intending to write my master’s results into a paper. But in 2005, he invited me to do PhD research with the Antarctic Geological Drilling project (ANDRILL), a multinational collaboration to investigate past climate change. I had concerns about doing a PhD at the same university that I earned my earlier degrees from. But the geology department had expanded to run the Antarctic Research Centre and had a greater focus on international collaboration. I decided that pursuing a PhD there would be a good career move.

#### Describe your role in the ANDRILL research.

I was meant to focus on sedimentary petrology, working out the origin of sediments in 1-metre cores from the Antarctic ice shelf. But ANDRILL found evidence of past cycles of ice-sheet expansion and retraction coming out of this one-of-a-kind 1.3-kilometre drill hole. We found 60 cycles of an alternating pattern. Documenting and interpreting these cycles became one of the more important parts of the project, and I worked on that. Our team’s findings confirmed that the ice sheet was highly variable, which had been the subject of speculation.

#### What did you learn from that experience?

You have to grasp the opportunities presented to you, even if they are high-risk, high-reward. Still, I realized that I should have a back-up plan. Luckily, the 1.3-kilometre drill hole was that plan, and it proved to be quite fruitful.

#### How have international collaborations helped your career?

I’ve spent 2–3 months at a time on expeditions with people from the United States,



Europe and Japan. These trips are bonding experiences, which I think facilitates continued collaborations — invitations to labs all over the world. Big interdisciplinary projects bring together hugely diverse groups of people. My work on ANDRILL led to a paper in the *Geological Society of America Bulletin* (R. McKay *et al.* *Geol. Soc. Am. Bull.* 21, 1537–1561; 2009), which received a lot of attention from the palaeoclimate community because it was one of the most detailed records yet published of Antarctic climate history and fluctuations in the ice sheet. That led to an invitation to take part in the Integrated Ocean Drilling Program, an international marine-research initiative. I’m taking my palaeoclimate work from the ice sheet to the ocean, trying to determine how ocean chemistry dynamics affect climate.

#### How will the Emerging Science prize affect your career?

It certainly will help with my imminent job search. It’s prestigious and helps to bring attention to climate research. I hope to use some of the NZ\$200,000 (US\$160,000) prize money to get another PhD student involved in my next project, which is likely to involve sea-level histories around New Zealand, and to fund collaborative research with an overseas lab.

#### To what do you attribute your success?

There is an element of luck. I was fortunate to work on this amazing drill hole that had features that had never been seen before. I’m also really interested in the research, and have learned to overcome intimidation to put my ideas out there. ■

INTERVIEW BY VIRGINIA GEWIN