

scholarship from Chile is that he move back within two years of finishing his PhD — and he wants to make sure his South American connections stay strong. “Every time I go home to visit family, I also make sure I visit my old MSc professor,” he says.

Roving scientists may really reap their rewards when they come home, says Stephan — as can the country to which they return. “Returnees are likely to continue to collaborate with scientists in the country where they trained and thus provide a means of diffusion of knowledge in the home country,” she says. They also train new generations of scientists, passing on knowledge gained from different countries and cultures.

That rings true for Mehmet Somel. He moved from Ankara, Turkey, to the University of Leipzig, Germany, for his PhD, and then to postdoc positions at the CAS-MPG Partner Institute for Computational Biology in Shanghai, China, and the University of California, Berkeley. Now, he has returned to Ankara as an evolutionary biologist at the Middle East Technical University, from which he earned his undergraduate and master’s degrees. “Biology in Turkey is relatively underdeveloped compared to other disciplines, especially evolutionary genetics,” he says. “I wouldn’t have been able to get the training and tools I needed to contribute without going abroad.”

The benefits of working abroad in three highly diverse cultures continue to accrue. “I am still collaborating with nearly all the people that I worked with,” Somel says. Not only that, but he had the opportunity to see how different laboratories were managed. “I could take away what I learned from each one and apply them to my lab in Ankara.”

But not everyone returns. Colchero opted to move from Mexico to the United States because that was where he could pursue the studies that most interested him. He has considered moving back to Mexico at several points in his career, but it is looking less likely, he says. “The economic climate has made it almost impossible to get a job in academia. So we’ve decided not to return.” His is a common tale: a 2011 study found that although one in eight of the world’s most highly cited scientists from 1981 to 2003 were born in developing countries, 80% of this fraction worked in developed countries, mostly the United States (B. A. Weinberg *J. Dev. Econ.* **95**, 95–104; 2010).

Every researcher who relocates recounts a different experience, and the choice of whether to move comes down to weighing the odds. For Biggs, the pluses win out: being mobile as a researcher might affect one’s productivity in the short term, he says, “but when you’re looking longer term, you know that it will benefit you in the end.” ■

Julie Gould is the editor of *Naturejobs*.

TURNING POINT

Kai Landskron

Like many researchers, chemist Kai Landskron struggles to piece together enough funding to keep graduate students in his lab at Lehigh University in Bethlehem, Pennsylvania. In March, he started an unconventional crowdfunding campaign — selling discount cards on his lab webpage that are valid at more than 100,000 restaurants, cinemas and shops.

How would you describe the current US funding climate?

Securing funding for research is the most difficult — and most frustrating — part of a job that I otherwise love. The funding climate is very bad. I think that the effort needed to obtain research funding is no longer proportionate to the money that you get, and I believe that this is true for many people. I have enough funding from the US National Science Foundation, the US Department of Energy and Lehigh University to work until the end of 2018. It is enough to support five postdocs and graduate students — the size of my lab for the past four years.

What projects will donors be supporting?

My group is developing nanoporous materials for use in greenhouse-gas reduction, catalytic converters, air and water purification and energy storage.

How much of your time do you spend writing grant applications?

More than half. I have applied for five to ten grants each year, including federal, state and private-foundation grants — basically, any opportunity that presents itself. I have more publications than one might expect relative to the number of personnel and dollars I have.

How did you decide to sell discount cards?

I wanted to pursue a crowdfunding model, but I did not want to use a platform such as Kickstarter. Instead, I wanted to use my own university website as the crowdfunding platform.

Why?

Kickstarter allows technology projects if they create a consumer product, but that is not a typical outcome of basic scientific research. And often, crowdfunding campaigns offer perks for different levels of donations. In researching my options, I found these discount cards, which are valued at US\$10. But, depending on how often one uses them, they can actually save the cardholder more than \$10, and they ship easily and inexpensively. Supporters can also give a charitable donation. Often, funding organizations



and the public seem to expect science to refund society immediately. That is difficult to achieve, because scientific research is a long-term endeavour. But with this card, I can return the value to society — or at least to the donor.

How many have you sold so far?

Not very many. Fewer than 50. But I have had a few people also give donations.

What is the campaign’s biggest challenge?

Getting the word out. I am hopeful that talking to the press will work as an advertisement that could spread further through social media.

What do your colleagues think of the idea?

The feedback has been positive — basically, people are saying that I’m showing ingenuity. One colleague in my department has changed his website to be able to receive donations, too.

Would you contemplate moving to another country, where funding might be better?

That is a complicated question in several ways. I am settled here for personal and professional reasons. And leaving is a complex decision that would involve more than solely funding concerns. I have colleagues in other countries who say it is not easy to find funding where they are either. But if funding in another country were dramatically improved, for example, I would consider it.

What is the outlook for your future funding?

To me, the tunnel seems to be getting darker rather than brighter. That is something that scares me. I’ve got 25 years ahead of me. If it gets even worse than now, that is a scary prospect. ■

INTERVIEW BY VIRGINIA GEWIN

This interview has been edited for length and clarity.