at the University of California, Berkeley, says that in her native Switzerland, people typically reply to nearly every work-related message. "It's almost mandatory that you answer," she says. In California, she found a more relaxed approach. When she e-mailed another researcher to request a data set and heard nothing, she wondered if she had done something wrong and the person did not want to collaborate. She did not send a follow-up message because, she says, that would be considered rude in Switzerland. Eventually she realized that ignoring or 'losing' e-mails was common in the United States. Now, if a message goes unanswered, she sends another e-mail a few days later and usually gets a friendly response.

Other scientists find that the priorities attached to socializing differ from what they are used to. In Reza's experience, people in Bangladesh do not usually take coffee breaks at work. But in Sweden, he realized that it was important to attend *fika*, coffee breaks that the department usually took each day. "We are obsessed with *fika*," he says. The gatherings provide opportunities to make social plans, hear what other groups are doing and discuss research issues.

Some scientists welcome the change of pace offered by a fresh environment. Ecologist Christine Lucas moved from the United States to Uruguay for a postdoc position and is now a faculty member at the University of the Republic in Paysandú. She found that her new colleagues tended to keep a better work–life balance. When she became pregnant, she easily postponed the start of her postdoc by a few months; once she began, she had flexible hours, could sometimes work from home and designed a project that required little fieldwork. Friends who did postdocs in the United States seemed, to her, under more pressure to work with lab members face-to-face and to meet tough publication targets. And, she adds, it is acceptable for her department meetings in Uruguay to start 5–10 minutes late — allowing for unexpected obstacles such as transport strikes.

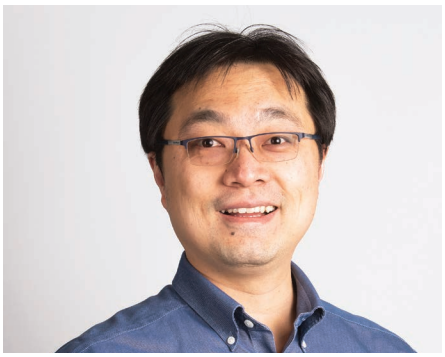
Whether they are welcoming international students or starting work in new countries, scientists can ease the transition by remaining non-judgemental. People sometimes brush off a student from another country as 'rude', but "in their culture, they're not", Amratia says. Researchers should also remember that their nation's customs aren't necessarily best. Solter says that his Croatian background helped him here: "When you come from a small country, you don't assume everybody should be doing things your way," he says. "I never cared if somebody was different than me as long as it didn't seriously affect the rest of the lab." ■

JEAN LACHAT/UNIVERSITY OF CHICAGO

Roberta Kwok *is a freelance writer in Kirkland, Washington.*

BACK STORY
Brain stimulator

Materials scientist Bozhi Tian developed silicon-nanowire solar cells in 2007. Now, at the University of Chicago in Illinois, he has shown how similar nanoscale devices can be used to manipulate brain signals with light.



Describe what your team's latest study has achieved.
We've shown that we can stimulate behaviour in a mouse by placing a nanoscale silicon mesh on the part of the brain that translates nerve impulses into movement, and then shining a light onto the mesh (Y. Jiang *et al. Nature Biomed. Eng.* https://doi.org/10.1038/s41551-018-0230-1; 2018). For example, we were able to control the animal's left forelimb by flashing a beam at the right side of its brain.

Why is this approach game-changing?
Until now, there have been only two main methods of neurostimulation. The first involves implanting electrodes to produce neural activity. The second, called optogenetics, requires cells to be genetically modified so that they can be controlled using light, but genetic modification is difficult and carries ethical concerns. Our approach uses a non-genetic neurostimulation device that enables distant nerves to be stimulated with light. It could have a big impact on the treatment of pain and other disorders.

Has it led your research in a new direction?
Yes, we now plan to do research on non-human primates — for example, exploring how to restore grasping functions after paralysis.

Does the device have potential clinical applications?
If we put the silicon mesh on the brain surface, we can elicit some activity deep inside the brain. And if you can stimulate the brain, you can treat certain neurological diseases or help a person to regain control over parts of their body. So it could be used to treat diseases such as Parkinson's or disorders such as depression.

Describe one of your breakthrough moments.
My graduate student Ramya Parameswaran has demonstrated how a silicon nanowire can stimulate single cells (R. Parameswaran *et al. Nature Nanotech* **13**, 260–266; 2018). Some of the gold that catalyses growth of the silicon wire becomes individual atoms that cover the wire's surface. When we removed the atomic gold, some neurons couldn't be activated. We later found that the gold enhanced the silicon's electrochemical properties and made it a better neurostimulator.

You switched your research focus from energy to neurostimulation. What happened?
I left China to start a PhD at Harvard University in Cambridge, Massachusetts, in 2004, working on the use of single nanowires in photovoltaics. We showed that silicon nanowires can convert sunlight into electricity, just as conventional solar cells do. However, they are also small enough to be integrated into nanodevices. After that work was published (B. Tian *et al. Nature* **449**, 885–889; 2007), I decided to completely change my research interest from energy to electrophysiology and bioscience.

Why did you make that change?
Biology offered lots of opportunity and room for exploration, especially in bringing nanowires and neuroscience together. And I like to explore the unknown. So, for the second half of my PhD, I worked on developing a transistor that's small enough to be delivered into a single cell to record electrical activities.

How was the transition?
It was tough. I had no experience in cell culture, electrophysiology or working with animal tissues. I took a neuroscience course and learnt tremendously from that. Even so, there were setbacks. For example, my cell cultures kept getting contaminated. But I told myself that good moments would come if I persisted.

How did you find collaborators?
When I began at Chicago, some biologists were interested in collaborating; others weren't. I gave a lecture to biophysics students, and Ana Correa, a biochemist and the wife of molecular biologist Francisco Bezanilla, attended. She introduced me to her husband afterwards, and he and I have since written grants and papers together. Sometimes you just need that right moment and right person. ■

INTERVIEW BY VIRGINIA GEWIN

This interview has been edited for clarity and length.