



US visa restrictions have forced some international researchers out of the nation.

## VISA BANS DESTROY SCIENTISTS' AMERICAN DREAMS

Five international students and postdocs reflect on a turbulent year triggered by the Trump administration's visa restrictions.

**A** flurry of US visa restrictions, along with ongoing anti-immigrant sentiment in the nation, has affected a countless number of early-career international researchers.

In early July 2020, the administration of US President Donald Trump announced a controversial, widely criticized policy to revoke visas of international students attending universities at which coursework was entirely online.

The policy was rescinded eight days later – but not before causing widespread distress and confusion among international students, their colleagues and their institutions.

A month earlier, the administration had suspended the issuance of H-1B visas – which allow for temporary employment of specialized, skilled workers in industry or academia – until the end of 2020.

In January, the administration added Nigeria, Myanmar, Eritrea, Sudan, Tanzania and Kyrgyzstan to the list of countries, currently totalling 13, that face the most-stringent travel restrictions.

Experts warn that a lack of scientific talent from other nations threatens US research and innovation. *Nature* spoke to five international researchers whose career paths and

aspirations have evaporated or have been put on hold as a result of the administration's visa bans and travel restrictions.

### **CHENYANGLI** ASSUME NOTHING ABOUT THE US VISA PROCESS

Soon after getting my PhD in theoretical chemistry from the University of Georgia in Athens in May 2015, I started a postdoctoral programme at Emory University in Atlanta,

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Georgia. I had been there ever since. In September 2019, I had renewed my H-1B visa, which can last six years. I had also started looking for a faculty job in China, where I am from, and in the United States.

Last December, I was invited to participate in a symposium for young scholars at a university in Beijing. I hoped that the invitation would lead to a job interview, so I travelled to China that month. At the time, I hadn't visited China in one and a half years, and thought that this would be a good opportunity to present my work, see family and visit my girlfriend. In the past six years, I've been back to China three or four times. It usually took two months at most to get my return visa to the United States.

I had my returning-visa interview on 31 December – and the questions that the US-consulate staff asked were different this time, such as whether my computer code was profitable or not – a strange question that I'd never been asked before. My visa was not cleared before COVID-19 broke out in China on 23 January, which shut down the consulate. All visa processes were halted. By February, consular personnel told me that they were actively working on my visa, so I thought that I would have a chance to go back to the United States. But COVID-19 got worse. Then, the visa bans started, so I now cannot return.

What's worse is that I haven't been paid since June. Because I'm on an H-1B visa, Emory could not continue to pay me because I have been outside the country for more than six months.

It is impossible for me to look for job opportunities in the United States, and the pandemic has worsened the funding situation, so many universities are in a hiring freeze. The most realistic goal for me now is to find a job in China. I stay in touch with my principal investigator at Emory, who is very nice and helpful, and we regularly meet virtually to work on a paper together.

Given the current job-market dynamics, and the fact that electronic-structure theory – my speciality – has a relatively small community, securing a position might be challenging. But the United States might have a few more job options in this subfield than do other nations. In China, universities often focus on high-impact applied research, so only a few institutions have a strong focus on theoretical chemistry. If I can get into one, I can still do the research that I want to do. If not, I might need to change my focus a bit to better fit into a department with a more-applied focus.

I have been advised to continue applying to top US universities because they are best positioned and resourced to offer visa support. My advice to international researchers: think twice before you go back to your home country during times of uncertainty.

**Chenyang Li** is a postdoctoral researcher in theoretical chemistry at Emory University in Atlanta, Georgia, and is now back in China.



**Gloriia Novikova, a PhD student.**

### **GLORIIA NOVIKOVA** **MAKE SURE YOU CONSIDER** **ALL YOUR OPTIONS**

I moved to Moscow from Moldova as a child. After a year of university in Russia, I came to the United States in 2013 to study chemical engineering at Purdue University in Indiana. In 2017, I came to Mount Sinai, a hospital in New York City, to work on my PhD, switching from studying cancer to Alzheimer's disease. In total, I've been here eight years on an F-1 student visa. Early on, I went back to Russia a couple of times each year, but I haven't been home in the past three years because I'm afraid I'll get stuck there and lose all the work that I've been doing.

At my institution, it's not just students but also a massive body of postdocs who are immigrants or are on visas. We share feelings of instability. Fortunately, our international-student office has been answering our questions and makes us feel that they are fighting for us.

That is all good, but there is a looming feeling that immigration troubles might become too complicated for our international-student office to do anything about. The US immigration system was very broken for a long time, even before this administration made it worse by restricting visas. When I first saw the now-rescinded announcement that would have forced international students attending online-only courses to be deported, my husband (who is also from Russia and works at a tech company on an H-1B visa) and I started to discuss moving to another country.

Many people don't realize how much work, dedication and sacrifice it takes to succeed in this country as an immigrant. Most of us leave our families behind to build a better life for ourselves. It's extremely difficult to move

to a different country, immerse yourself in a different culture – sometimes with language barriers – and become successful. It's a nerve-racking, strange way of living – especially in this moment.

If you know an international student, for whom this is probably an intense time, reach out to them. Ask them how they are doing, even if you can't offer help that would change anything for them. Knowing that someone cares and understands that we are all affected by these visa issues makes a difference.

I advise international students to explore other options for research training. Before these recent immigration concerns, I thought that I had to be in the United States, no matter what. If it's important to raise a family in an area where you feel stable and where immigrants are welcome, consider a different option.

It has been a scary and painful time because I truly love this country. I feel free, but I no longer feel secure and welcome. Now we ask ourselves: is the United States the best option right now? I don't know.

**Gloriia Novikova** is a PhD student studying Alzheimer's disease at the Icahn School of Medicine at Mount Sinai, New York City.

### **AZAN VIRJI** **BE CONFIDENT IN** **YOUR ABILITIES**

Tanzania, my home country, was added in January to the list of countries facing the most-stringent US travel restrictions. Most notably, Tanzanians are no longer allowed to sign up for the diversity lottery to get a 'green card', the immigration document granted to a permanent resident.

Because H-1B visas for skilled workers are now suspended until the end of 2020, international medical-school graduates can't start residencies – and therefore cannot help to care for people with COVID-19. I have written about how these policies have affected my pursuit of the 'American Dream'. I'm glad that I could provide a voice to the voiceless. Most international students are scared to speak up in that way.

As an international student who came here to be free from poverty and conflict, learning that this country is not welcoming has changed my entire perception of the United States. These policies will have a resounding impact on international students.

In March, I formed F-1 Doctors, a mentorship networking service to help international trainees to apply to US medical and dental schools. My co-founders, Benjamin Andres Gallo Marin and Ghazal Aghagoli, both of whom are students at the Warren Alpert Medical School at Brown University in Providence, Rhode Island, and I have recruited more than 90 mentors

EUGENIE GRUNIN

from more than 30 nations. Our service grew rapidly, and I shut down the website during June because we all needed the space to process what was happening with visa restrictions, but it is now running again.

International students should understand that they do not have to be significantly better than a US citizen to apply to medical schools in the United States. That said, just 49 of 141 US medical schools will accept applications from international students – and many of those will accept only Canadian citizens. We've created a document that includes the 31 schools that take international students, information on their financial-aid policies and where we could confirm that international students have matriculated.

**Azan Virji** is a second-year student at Harvard Medical School in Boston, Massachusetts, and is a co-founder of F-1 Doctors.

## UMAIR AHSAN HAVE A BACK-UP PLAN TO GO ELSEWHERE

I started a postdoc programme in plant molecular biology at Cornell University in Ithaca, New York, in May 2019. That was one month after I got married in Pakistan (where my wife and I are from and where she was living) and immediately after I got my PhD in Australia. It was a dream: the project and university were good. I was studying genes that boost yields of grafted tomato plants.

While finishing my PhD programme, I applied for a one-year US J-1 visa (a type of US visa often issued to postdocs) and received it in

April 2019. In June that year, my wife applied for a J-2 spousal visa, which was rejected. We couldn't appeal against the decision. You can reapply, but you should wait at least six to eight months, according to friends and lawyers, who counselled us to reapply jointly. Because my visa was valid for one year, we decided to reapply together in April 2020. I had planned a trip to Pakistan to visit my wife at that time, but then COVID-19 hit and the US embassy in Islamabad closed as a result – so I cancelled my trip.

In June, after the Trump administration's announcement that no new H-1B or J-1 visas would be issued, I decided to return to Pakistan, where I am now. I talked with my supervisor at Cornell, and said that I didn't want to ruin our project by staying in the laboratory. My research productivity and mental health were suffering because I was not sure what restrictions would be announced next. On top of that, we were constantly hearing about COVID-19 spikes, and there was so much uncertainty worldwide about the pandemic. And I knew that the situation would delay our visa process for another six to eight months.

Sitting in the airport on 30 June, ready to fly home to Pakistan, I tweeted that I was resigning from my programme and that the Trump visa policy is affecting the research careers of many people, leaving them with hard choices. I didn't expect my tweet to blow up, because I had only 95 followers at the time. But so far, I've received about 64,000 likes. It felt good. At least people have been reading my story.

Most likely, I'll go back to Australia and pursue different postdoctoral studies. My wife and I already have permanent visas there, which we received after applying online. We were meant to travel there in August, but the flights were cancelled because of an outbreak.

The US visa situation currently is very fluid and there is confusion all around. You might get a visa, you might not. I suggest that any international researcher thinking about going to the United States have back-up plans to go elsewhere. And if your spouse or partner plans to move to the United States with you, apply for visas together at the same embassy.

**Umair Ahsan** is a former postdoctoral researcher at Cornell University, Ithaca, New York, and is now back in Pakistan.

## YIXIN CHEN IT'S BEST TO KEEP YOUR PLANS FLEXIBLE

I'm on an F-1 visa, valid for five years. The now-rescinded federal announcement in July that visa holders attending online-only institutions would be deported hit me most directly. I couldn't work for a day or two when it was first announced.

Building a multilayered social-support system helps you to cope with stress. There are a lot of ways to do that: calling your family, catching up with your colleagues, following senior international scholars with strong voices on social media or joining a group chat or organization for international students. As for handling the anxiety that comes with news, it is important that we sometimes allow ourselves to be off the news cycle. Although the visa policy was dropped, I feel like the damage has been done.

The conflicts between China and the United States will probably continue beyond the Trump administration. The US response to the pandemic has caused international students to rethink the confidence that they had in this country. Pursuing a tenure-track position was already risky because the probability of getting a position is very low. There is a lot of uncertainty in US immigration policy that makes doing so more difficult. One specific advantage that the United States had was its ability to attract well-educated people from all over the world – and it has given that advantage away.

When I first got here in 2018, I assumed that I'd stay in academia and go on to a postdoctoral programme. Nearly every international student I know, including myself, has reconsidered their future career plans. I'm now more inclined to go into industry or to find a job in China rather than pursue a postdoctoral position in the United States.

**Yixin Chen** is a PhD student studying cognition and decision-making at Boston University, Massachusetts.

### Interviews by Virginia Gewin.

Interviews have been edited for clarity and length.



Umair Ahsan working in the laboratory.