

THIS WEEK

EDITORIALS

WORLD VIEW Bolster the data to build the foundations for sustainable development **p.299**

COOL TACTICS Minty menthol acts as switch in genetic circuits **p.300**



FACE OF THE FIFTY Alan Turing will grace Bank of England's new £50 note **p.303**

Balance security with openness

As US federal agencies tighten their anti-espionage policies, universities must protect their Chinese and Chinese American communities from profiling.

As the president of one of the world's most diverse and international universities, Rafael Reif probably never expected to be writing to students and staff explaining why immigration and international collaboration are not a threat to the security and integrity of the United States.

Reif, head of the Massachusetts Institute of Technology (MIT) in Cambridge, wrote an open letter in praise of diversity last month, after Chinese and Chinese American members of the institute's community reported being interviewed by law-enforcement agencies and asked about their links to China.

Targeting individuals from particular ethnicities in this way is not acceptable. As Venki Ramakrishnan, president of the UK Royal Society, writes on page 326, it violates the principle of “innocent until proven guilty”, an axiom of modern democracies. MIT's Office of the General Counsel should not have had to organize a special briefing, as it did last week, giving leading scientists from the affected communities contact details for MIT lawyers and advising them on what to do if approached, for example, by the FBI.

This troubling situation began before the last US presidential election, when lawmakers became concerned about academia's global ties, and in particular that its links to China represent an open door to spying and intellectual-property theft. But at the same time, Barack Obama's administration saw benefits from collaborations between the best US and Chinese researchers — funded by their respective governments, no less. But China's continued aspirations to become a global power, and the election of President Donald Trump have now escalated concerns.

Threats to the United States from China's government and its companies were among the top discussion items at last September's FBI Academic Summit — the annual gathering at which university and research leaders discuss security with representatives from law-enforcement, intelligence and security agencies. Meanwhile, in Congress, much of the charge continues to be led by Charles Grassley, chair of the Senate finance committee and Republican senator from Iowa.

GROWING SCRUTINY

Grassley's committee has been in correspondence with the US National Science Foundation (NSF) and the National Institutes of Health (NIH), demanding to know how they vet their grant recipients, how much they spend on policing misconduct, and the measures being taken to “punish foreign agents”. Even though funding agencies are not in the business of punishment, this scrutiny has unsettled both agencies. But it has also exposed gaps in how they monitor compliance with grant policies. This is prompting them to take action.

After a year-long sweep, the NIH says it has uncovered 180 scientists at 60 grant-holding institutions who have either violated peer-review policies — for example by sharing grant proposals with representatives of non-US institutions — or have failed to disclose non-US financial links, often with institutions in China. Not all of this will be espionage-related, but if the NIH is correct, it validates director Francis Collins's

decision to write to 10,000 universities last year, reminding them of their disclosure obligations.

More problematic are some of the recommendations from a group of university leaders commissioned by the NIH to advise the agency on tackling what it calls foreign influences on research integrity. The panel's advice includes updating NIH conflict-of-interest policies so that funded investigators must disclose any work with an international partner that might overlap with the scope of an agency award.

But the panel also recommends that universities vet academic staff before hiring them — implying that this would be an extra security check. It suggests that universities increase scrutiny of the movements

“The response to scrutiny needs to be both proportionate and evidence-based.”

of overseas visitors, and that they conduct written interviews with scientists who have travelled to “select countries” on research trips. University leaders, meanwhile, are encouraged to boost their awareness of “scientific topics that are more prone to interest by untoward actors”.

Universities and the NIH are also being encouraged to carry out a “broad education campaign” to reinforce the importance of adhering to NIH policies. This also includes asking investigators to keep records of interviews with students and postdocs, concerning their plans after leaving a laboratory.

Although no ethnic group is named, the panel mentions that China is a country of concern. This is fuelling fear among Chinese and Chinese American academics that their ethnicity and their scientific work are the main target — especially for those in cutting-edge fields. The NIH denies this (see *Nature* 571, 157; 2019).

So far, these are recommendations, not requirements. However, universities may well be minded to comply, considering that many of the same questions are being asked by the Senate finance committee, and that not doing so could risk their future NIH funding.

At the same time, both the NIH and the NSF know all too well that the shape and scale of their response to the scrutiny need to be both proportionate and evidence-based. And what little evidence there is from other countries indicates that broad academic monitoring exercises, for example those in counter-terrorism that target students from minority communities, have questionable value for reducing security risks.

The NSF, in its own response published last week, says that it has commissioned the independent scientific advisory group JASON to assess how universities could maintain the balance between openness and security. This is the kind of response that others should adopt, although ‘security’ must include the security of those people from minority groups, such as Chinese and Chinese American scientists, who have made an important contribution to the success of US science.

Every academic institution has a duty to prioritize the safety and security of its communities, but it must also, as Reif reminded his colleagues last month, “take great care not to create a toxic atmosphere of unfounded suspicion and fear”. ■