

this mutant will move to neighbouring states and become the dominant mutant”, says Guleria.

But Indian scientists are particularly interested in reports of a variant with two mutations that do not match previously catalogued variants of concern. The ‘double mutant’ has been found in 15–20% of samples from Maharashtra, India’s worst-hit state, says Jameel.

Little has yet been published on this variant, but Jameel says there is cause for concern. “The two mutations are likely to improve the virus’s binding capacity to the receptors and evade antibodies,” he says.

India must “conduct post-vaccine surveillance”, he argues, to find out whether vaccinated individuals are becoming infected, owing to mutating viruses or waning immunity.

In the same month the OSTP guidelines and memorandum were published, US Congress voted into law some broad requirements – that federal agencies must have disclosure rules, and that the OSTP must ensure the rules are consistent across agencies – in the National Defense Authorization Act (NDAA), an annual defence policy bill.

But meeting all the requirements might be too expensive for some smaller universities, says Deborah Altenburg, associate vice-president for research policy and government affairs at the Association of Public and Land-Grant Universities (APLU) in Washington DC. She hopes that the items are viewed as recommendations and not “a checklist of things that every university should do”.

One agency is pressing ahead with changes suggested by the JCORE report. In a notice released in March, the NIH for the first time asked scientists to include copies of contracts or agreements with any foreign institutions, including a translation of the original documents if they are not in English, when applying for or submitting updates to grants.

The NIH’s new requirements take effect in May, a deadline that universities and researchers could struggle to meet, says Kristin West, director of research ethics and compliance at the Council on Governmental Relations, based in Washington DC. Some contracts might contain non-disclosure or confidentiality clauses, she explains, which would need to be navigated for the first time, in addition to getting translations.

The Biden administration indicated how it might deal with research security issues in March. OSTP staff member Aaron Miles, one of the authors of the JCORE report, said at a presentation to the National Science, Technology, and Security Roundtable hosted by the National Academies of Sciences, Engineering, and Medicine, that Trump’s memorandum “is government policy, and we are moving forward with implementation”.

It is still unclear how the Biden administration will approach concerns of scientists of Asian descent that they are being racially profiled by US research security efforts.

In January, civil-rights groups called on the Biden administration to shut down the Trump administration’s China Initiative, launched in 2018 by the Department of Justice to prevent theft of US intellectual property by the Chinese government. The groups said the programme “has greatly increased the targeting and profiling of Asian Americans and immigrants, particularly those of Chinese descent who are working in science and technology”.

A mass shooting in March brought fresh attention to anti-Asian racism in the United States, when a gunman killed eight people, including six Asian women, in Georgia. Civil-rights groups have seen a spike in incidents of anti-Asian violence over the past year.

US UNIVERSITIES CALL FOR CLEARER RULES ON SCIENCE ESPIONAGE

Trump-era research security guidelines spark concerns over transparency and racial profiling.

By Nidhi Subbaraman

The US government is converging on a long-awaited set of rules designed to protect the nation’s science from theft by foreign spies. A series of announcements this year describe steps that US universities and researchers must take when reporting foreign financing and collaborations to the country’s science funders.

But university groups say they need more clarity on how to implement the rules. And the guidelines do not spell out how institutions can address concerns of racial profiling sparked by the US government’s crackdown on foreign interference in recent years.

The guidelines date back to the last days of former US president Donald Trump’s administration; so far, President Joe Biden’s administration has not indicated that it will seek to change the policies, but it is open to feedback.

Before he left office in January, Trump issued a memorandum describing the US government’s responsibility to protect the country’s research. Simultaneously, the White House Office of Science and Technology Policy (OSTP) published research security guidelines for universities and funding agencies. And in March, the US National Institutes of Health (NIH) announced new requirements for information that scientists applying for grants must disclose – becoming the first US agency to act on the OSTP’s guidelines.

Together, the announcements represent a turning point. For years, US funding agencies have required grantees to flag funding from foreign sources. Since 2018, however, the government has imposed penalties more frequently, and sometimes pressed criminal charges, on scientists who breach that

requirement. Under this increased scrutiny, university administrators called for clearer rules on what scientists must disclose, including better definitions of conflicts of interest.

University leaders hoped that the OSTP project, launched in 2019, would address some of these concerns.

This year’s announcements are positive, says Tobin Smith, vice-president for science policy and global affairs at the Association of American Universities (AAU) in Washington DC. But the AAU and other groups hope the requirements will be fine-tuned. “We would still seek additional clarity to even make it more well-defined,” says Smith.

Guidelines delivered

The OSTP guidelines, drafted by the National Science and Technology Council Joint Committee on the Research Environment (JCORE),

“We would still seek additional clarity to even make it more well-defined.”

suggest that universities create teams devoted to all aspects of research security, with members who are experts on cybersecurity and export controls; set penalties for violators; and provide training for faculty members who are considering participating in foreign “talent programs” that recruit and fund researchers. One such programme is China’s Thousand Talents Plan.

Trump’s companion memorandum instructed funding agencies to vet foreign visitors and to limit the participation of US government employees in such talent programmes.