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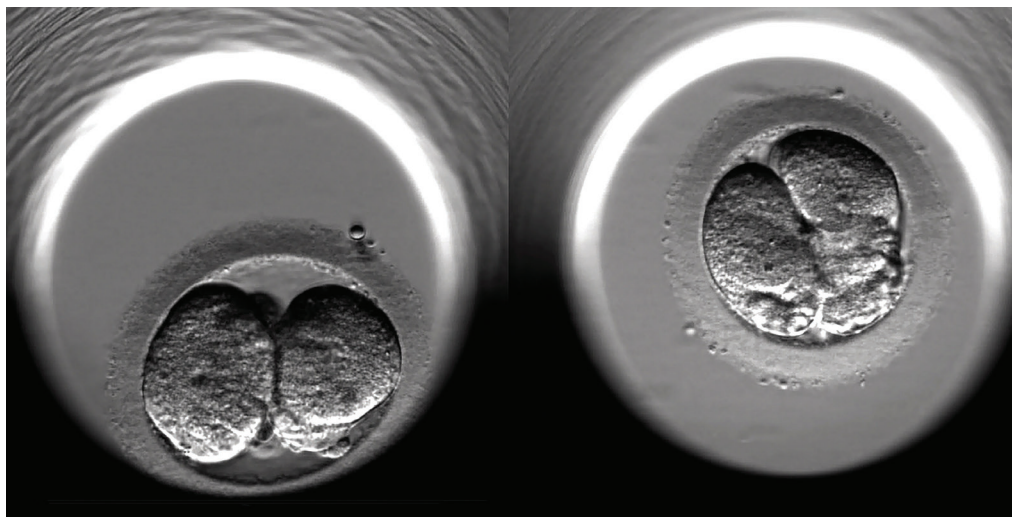
the strategies that might be used.”

The WHO decided to weigh in on genome editing after Chinese biophysicist He Jiankui said in November that he had modified the genomes of two girls to make them resistant to HIV. His use of the technology was nearly universally condemned, and the Southern University of Science and Technology in Shenzhen, China, fired him in January. Late last month, China's health ministry issued draft regulations to restrict the use of gene editing in people.

But scientists are split on whether a complete moratorium on the clinical use of germline editing is appropriate. Two weeks ago, a group of ethicists and scientists — including some of the inventors of CRISPR — published a Comment in *Nature* calling for “a fixed period during which no clinical uses of germline editing whatsoever are allowed” (E. S. Lander *et al. Nature* 567, 165–168; 2019).

In an accompanying Correspondence, the leaders of the US National Academy of Medicine, the US National Academy of Sciences and the UK Royal Society opposed such a plan, arguing that “we must achieve broad societal consensus before making any decisions, given the global implications of heritable genome editing” (V. J. Dzau *et al. Nature* 567, 175; 2019).

The registry recommended by the WHO committee is an attempt to bridge the gap until the world agrees on a framework to govern gene editing in people. The panel says



Changes to the genomes of human embryos (pictured) can be passed down to future generations.

that the registry should cover studies of the clinical applications of human genome editing — including both changes to the germ line and techniques that alter a person's genes in ways that won't be inherited. The latter has not generally been controversial.

The transparency recommended by the WHO panel is the right approach, says Helen O'Neill, a molecular geneticist at University College London who works on CRISPR. “Speaking to researchers about their research

and being very open is the best way forward, to open it to discussion rather than polarizing the debate,” she says. “It just says who is doing what and how can we talk about this.”

O'Neill would like to see the WHO panel take its time developing recommendations for international governance. She says that the negative reaction to He's work, and the media attention, should deter other scientists from undertaking similar experiments before the governance question is settled. ■

POLITICS

Universities spooked by Trump free-speech order

US institutions must certify that they protect free speech to receive research funding.

BY SARA REARDON

US President Donald Trump signed an executive order on 21 March that requires universities to certify that they protect free speech, or risk losing federal research funds.

Public institutions will have to certify that they are following free-speech protections laid out in the First Amendment of the US Constitution, and private institutions must promise to follow their stated policies on free speech.

The order applies to 12 research agencies, including the National Institutes of Health, the National Science Foundation, the Department of Energy and NASA. It affects only money for research, not financial aid for students.

“We're dealing with billions and billions and billions of dollars,” Trump said in a speech just

before signing the order. “Taxpayer dollars should not subsidize anti-First Amendment institutions.” He said that the order was the first in a series of steps that his administration intends to take to “defend students' rights”.

Details of how the Trump administration will implement and enforce the order are still fuzzy, but academic organizations are concerned that the policy could create more problems than it will solve.

The order is “a solution in search of a problem”, and seems designed to undermine trust in higher education and science, said Julie Schmid, executive director of the American Association of University

“What the administration is trying to protect is not, in fact, free inquiry.”

Professors in Washington DC, in a statement.

“It is also troubling that in his remarks the president sought to drive a wedge between students and faculty, casting his executive order as a ‘clear message to the professors’ that their funding was now at risk while also raising the specters of ‘political indoctrination’ and ‘coercion,’” Schmid wrote.

Peter McPherson, president of the Association of Public and Land-Grant Universities in Washington DC, called the order “plainly unnecessary” in a statement. “Public universities are already bound by the First Amendment and work each day to defend and honor it,” he said.

But Sigal Ben-Porath, a political philosopher at the University of Pennsylvania in Philadelphia, says that the order might not have significant practical implications. ▶



Trump announced his plans for the executive order in early March.

► “It reads to me more like a declaration and a message to some parts of the voting population than an actual regulatory or legal change,” she says.

Universities must comply with numerous federal regulations — such as laws barring discrimination on the basis of race or gender — to receive federal research funding. Complying

with the free-speech order could be as simple as filling out a little more paperwork, Ben-Porath says. Still, she is concerned that the president’s real motivation is political.

In remarks earlier this month, Trump drew connections between the policy and an incident last month on the campus of the University of California, Berkeley. A

conservative activist was assaulted while recruiting students to his organization. Neither the activist nor the man accused of punching him — who was arrested and pleaded not guilty — is a student at the university.

Announcing the order in the context of the Berkeley protests “tells me that what the administration is trying to protect is not, in fact, free inquiry, but the enhancement of conservative voices”, Ben-Porath says.

FUZZY FUTURE

The order is likely to be legally controversial, says Frederick Hess, director of education-policy studies at the American Enterprise Institute in Washington DC. Although the text of the policy does not mention politics, Trump’s speeches and tweets have indicated that his action is intended to protect conservative voices, Hess says.

Ultimately, the courts are likely to decide whether the order stands. Hess says that it will be difficult for anyone to sue the administration over the policy until the government clarifies its definition of protecting free speech and outlines any consequences for universities that do not meet those criteria.

The Trump administration plans to release more information in the coming weeks and months about how the order will be implemented and enforced. ■

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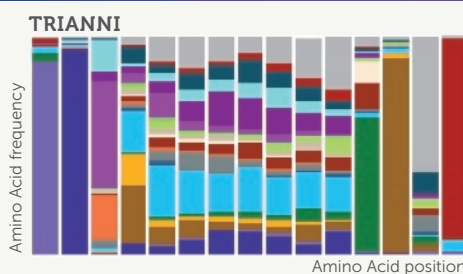
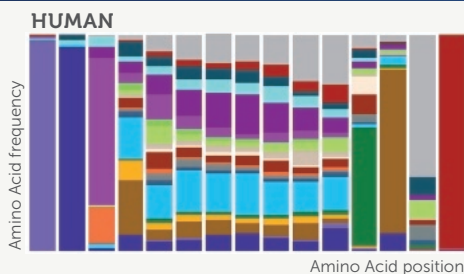
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