Advocates say there is a lot to like about the OSTP's new guidance, but the framework is vague about things such as the enforcement of sanctions for people who break the rules, as well as the protocol for scientists seeking to talk to journalists or the public about their work. Those details will all be left to each agency's discretion.

"I think that's a missed opportunity," says Lauren Kurtz, executive director of the Climate Science Legal Defense Fund, an advocacy group based in New York City. Although the policy seeks to create an independent panel that could provide consistency from administration to administration, Kurtz warns that these efforts aren't guaranteed to withstand future political meddling. A hostile administration could wipe out the entire framework — as well as individual agencies' policies — with the stroke of a pen.

A permanent solution would be to enact a federal law that would make it illegal for government officials now and in the future to violate scientific-integrity policies. Thus far, efforts to introduce such a bill in Congress have fallen short, but Carter remains hopeful.

"Eventually, all of this has to be codified in legislation," he says.

Virologist Linfa Wang's top priority is to meet with lab groups in Beijing and Guangzhou that will focus on preparing for pandemics. "We can now plan with a bit more certainty," says Wang, at Duke–National University of Singapore Medical School.

"Many people are eager to re-engage with China and the scientists here," says Thomas Stidham, an avian palaeontologist at the Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, in Beijing.

International collaborations have dwindled during the pandemic, but a return to in-person meetings should help revive them, says Caroline Wagner, a science-policy researcher at the Ohio State University in Columbus.

Flights into and out of China are expected to increase from their pandemic levels, which will boost research connections, says Li Tang, a science- and innovation-policy researcher at Fudan University. However, flights are expensive at the moment, and limited flight connections might make people reluctant to travel to and from China in the immediate future.

CHINA IS FINALLY OPENING UP — WHAT IT MEANS FOR RESEARCH

Researchers are organizing to meet, now that the country's 'zero-COVID' policy has ended.

By Smriti Mallapaty

alaeoanthropologist Clément Zanolli has been waiting over three years to see ancient teeth, unearthed in China, that could belong to a previously undescribed ape. Zanolli, at the University of Bordeaux, France, had to cancel his travel plans when China shut its borders in response to the COVID-19 pandemic in early 2020. But with the government lifting its onerous quarantine requirements for incoming travellers this month, Zanolli is one of many researchers planning their return to China for conferences, face-to-face meetings and fieldwork.

It's "fantastic that the borders are finally open", says Alice Hughes, a conservation biologist at the University of Hong Kong, who hopes to travel to the Chinese mainland around April. This is long overdue, she says.

China's strict 'zero-COVID' policy to quash the spread of the disease was among the longest and harshest worldwide. For almost three years, citizens endured mandatory testing, whole-city lockdowns and lengthy quarantines. The restrictions meant that researchers in China were largely confined to their campuses because regional and international travel was time-consuming, unpredictable and often expensive. Meanwhile, most researchers abroad were locked out of China.

But the lifting of the policy in December has led to a surge in infections across the country. This has left some researchers cautious about travelling to China, although they hope that outbreaks will slow down soon.

Many researchers in China plan to attend conferences abroad later this year now that quarantines for returning travellers have been lifted. Jingbo Cui, an economist at Duke Kunshan University, China, wants to attend meetings in the United States and the United Kingdom to help rebuild his international reputation. "Our research needs exposure." And geneticist Shuhua Xu, at Fudan University in Shanghai, hopes to do an academic exchange with researchers at the University of Cambridge,

Researchers outside China are also making plans to visit their Chinese colleagues.



Travel restrictions have eased in China.

Persistent barriers

For some researchers, the excitement of China opening up is tempered by geopolitical tensions. The United States, Europe, the United Kingdom and Australia have increased their focus on national security and competitiveness, which might deter researchers in those regions from collaborating with their Chinese peers, says James Wilsdon, a science-policy researcher at University College London.

And in recent weeks, some countries, such as South Korea, the United States and Australia, have introduced testing requirements and other restrictions on travellers entering their borders from China because of the huge wave of COVID-19 infections there. China, in turn, has said it will not be issuing visas for travellers from some of those countries.

The pandemic has also politicized specific areas of research, including the origins of SARS-CoV-2, making scientific engagement difficult. Edward Holmes, a virologist at the University of Sydney in Australia — who, with his long-time collaborator virologist Zhang Yongzhen at Fudan University, publicly shared the SARS-CoV-2 genome in January 2020 — has no plans to visit China any time soon for fear that his work there could be censored.

Still, researchers in China are relieved that domestic travel will now be easier. Aaron Irving, an infectious-diseases researcher at Zhejiang University in Haining, China, hopes to visit caves to trap bats coming out of hibernation to study, among other things, the bacteria and viruses they harbour, after having to cancel two trips owing to COVID-19 outbreaks.

1. Zhang, Y. Z. & Holmes, E. C. Cell 181, 223-227 (2020).