



EcoHealth Alliance president Peter Daszak testified before a congressional panel on 1 May.

US HALTS FUNDING TO CONTROVERSIAL VIRUS-HUNTING GROUP

Scientists are divided over whether the decision on EcoHealth Alliance is fair, or will hurt virus research.

By Mariana Lenharo

The US Department of Health and Human Services (HHS) has suspended federal funding for EcoHealth Alliance, a New York City-based non-profit organization that came under scrutiny during the COVID-19 pandemic for collaborating with a virology laboratory in China that was accused of potentially leaking the SARS-CoV-2 coronavirus. Researchers who spoke to *Nature* are divided in their reaction to the decision: some think the HHS made the right call, given EcoHealth's apparent failure to comply with the terms of a grant that it had received, undermining public trust; others say the decision seems to be unfairly wrapped up in politics.

In a 15 May memo detailing the decision, Henrietta Brisbon, the HHS's suspension and debarment official, argued that EcoHealth had not provided adequate oversight of research activities at the Wuhan Institute of Virology (WIV) in China. The WIV was a subrecipient of a federal grant awarded to EcoHealth by the US National Institutes of Health (NIH), meaning that it was a partner given funds to carry out some of the research covered by the grant. The document also describes how EcoHealth repeatedly failed to provide

information requested by the NIH pertaining to the research conducted.

The decision by the HHS came two weeks after EcoHealth's president, infectious-disease specialist Peter Daszak, was grilled during a hearing run by a US House of Representatives subcommittee investigating the origins of the COVID-19 pandemic. During that session, Republican representatives suggested that EcoHealth had conducted risky research with the WIV, and Democrats criticized the non-profit group's lack of transparency.

In announcing the suspension of funding to EcoHealth, the HHS also proposed debarring the organization from federal funding. Debarments are more-definitive haltings of grant money, generally lasting up to three years, and are usually reserved for serious violations. According to a 2022 report, the HHS issued 134 debarments between 2015 and 2019, most of them in response to a criminal conviction or civil judgment. On 21 May, the HHS announced the suspension and proposed debarment from funding of Daszak himself.

In a statement, an EcoHealth spokesperson said that the organization was disappointed by the HHS's decision and would be contesting the proposed debarment of the organization. "We hope we will get a fair chance to present

the volumes of evidence we have that all of these allegations are false, and that they do not rise to the level of something that should lead to an organization being debarred in this way," Daszak told *Nature*.

It is important for research organizations to demonstrate that they have a robust oversight system, says social scientist Filippa Lentzos, a specialist in biosecurity at King's College London, "even more so when we're talking about research with pandemic risks, where potentially the entire world could be affected by an accident". She adds that the decision to suspend funding seems appropriate: "Whatever the particulars of the EcoHealth Alliance case, it is clear the institution has lost the confidence of the HHS, politicians on both sides of the aisle and many other stakeholders to act safely, securely and responsibly."

EcoHealth could have done a better job of explaining its work to the NIH and to the public, acknowledges Lawrence Gostin, a specialist in health law and policy at Georgetown University in Washington DC. But, in his view, the suspension has a strong political bent to it. "It's not clear to me at all whether this decision was based on science, ethics or politics," he says. "There's been this drumbeat of criticism of EcoHealth Alliance, particularly from congressional Republicans, and there's been this myth that the WIV was responsible for the pandemic, but all of the evidence points in the opposite direction," to a natural spillover of SARS-CoV-2 from wild animals to humans, he adds.

Two-year delay

EcoHealth had been collaborating with scientists in China to study pathogens with pandemic potential for years when, in 2014, it received a grant from the NIH to investigate bat coronaviruses. The agency suspended this grant in April 2020, early in the pandemic, which then-president Donald Trump had been publicly implying that China might be responsible for. The funding was reinstated in May 2023 under extensive restrictions, but the WIV was debarred from receiving US funding through subawards later that year.

EcoHealth's suspension was motivated by the alleged lack of compliance with the 2014 grant's terms and conditions. One key problem listed by the HHS is EcoHealth's submission of a grant progress report more than two years past the deadline. The HHS said that this report contains information suggesting that an experiment conducted by the WIV might have enhanced the growth of a modified virus beyond a replication limit set by the NIH. EcoHealth and the WIV were modifying a coronavirus linked to severe acute respiratory syndrome (SARS), to study the potential origins of this type of virus in bats. When reviewing progress on the grant, the NIH told EcoHealth that if any virus generated under the grant showed evidence of replication beyond

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the set threshold, the non-profit organization should ensure that all experiments were halted and should communicate the issue to the agency, which was not done. This led the HHS to conclude that the research “likely violated protocols of the NIH regarding biosafety”.

An EcoHealth spokesperson denied that it had violated the terms of the grant, given that the experiments did not rise to a level that would be considered significant enough to report as unusual. Regarding the delay in submitting the report, the spokesperson said that EcoHealth had made every effort to file the report on time, but had been “stymied by contradictory advice from NIH grant management officials, and an online system [for submitting the report] that is confusing and error-prone, leading to multiple instances where the system locked us out”.

The HHS memo says that, according to a forensic audit performed by the NIH, EcoHealth was never locked out of the system.

Federal auditors have cited the NIH for not pursuing the late report and recommended that the agency intensify its monitoring of foreign institutions that receive NIH funds.

Addressing the HHS’s allegation that EcoHealth had failed to respond adequately to the NIH’s requests for information and materials related to the WIV’s research, the spokesperson said that, given the geopolitical pressure on US–China relations during the pandemic and the fact that the HHS, the World Health Organization (WHO) and the intelligence community had all been unable to get evidential information from the WIV, “it is outrageous to propose this as grounds to debar our organization”.

Questions of oversight

Amesh Adalja, an infectious-disease specialist at the Johns Hopkins Center for Health Security in Baltimore, Maryland, says that any grant recipient is expected to comply with a series of conditions – which include submitting reports in a timely fashion and overseeing partner institutions – and that the HHS memo seems to indicate that EcoHealth did not fully meet those standards. “There’s enough listed there to call into question what type of stewardship was going on with that taxpayer money,” he says.

EcoHealth Alliance has played an important part in illuminating scientists’ understanding of emerging viruses, Gostin says. In addition to conducting coronavirus surveillance in wildlife, the group has studied the spillover of Nipah virus and other pathogens to humans. He worries that the suspension could disincentivize research aimed at pandemic preparedness and prevention that’s being done in partnership with other countries.

The next pandemic could easily arise in a country that trades wild animals, such as China, so the type of research and surveillance

that EcoHealth does is important, Gostin says. Before the suspension, EcoHealth had three active NIH-funded grants supporting efforts to study the risk of emerging viruses in countries such as Bangladesh, Myanmar and

Vietnam. Since 2008, it has been awarded a total of US\$90.3 million in federal funding, \$19.59 million of which was from the HHS.

Additional reporting by Max Kozlov.

THE ORIGIN OF A PEST: HOW THE COCKROACH CONQUERED THE WORLD

Genomic analysis suggests cockroaches reached the world from Europe, but weren’t from there originally.

By Bianca Nogrady

A ubiquitous household pest has unexpected origins. A cockroach that lives in human dwellings all over the world is known as the German cockroach – but it did not originate in Germany. A study published last week in the *Proceedings of the National Academy of Sciences* suggests that the creature originated in South Asia and spread globally because of its affinity for human habitats (Q. Tang *et al. Proc. Natl Acad. Sci. USA* **121**, e2401185121; 2024).

Swedish biologist Carl Linnaeus was the first scientist to describe the cockroach – which he named *Blattella germanica* – in 1776 in Europe, hence the assumption about its German origins. “They did not originate from there, but they were domesticated there and then started to spread across the world,” says study co-author Qian Tang, an evolutionary biologist now at Harvard University

in Boston, Massachusetts.

Tang and his colleagues analysed the genomes of 281 German cockroaches collected from 17 countries, including Australia, Ethiopia, Indonesia, Ukraine and the United States. They used the similarities and differences between the genomes to calculate when and where different populations might have been established.

The authors found that the closest living relative of the German cockroach is probably the Asian cockroach *Blattella asahinai*, which is still found in South Asia. *Blattella germanica* probably split off from it around 2,100 years ago.

Then, around 1,200 years ago, *B. germanica* hitchhiked west into the Middle East with the commercial and military traffic of the Islamic Umayyad and Abbasid caliphates. It began to spread east from South Asia around 390 years ago, with the rise of European colonialism and the emergence of international trading firms



The German cockroach (*Blattella germanica*) is found all over the globe.