# Information Suppression in the Early COVID-19 Response and the History of Cover-ups in Microbiology

Hideki Kakeya, University of Tsukuba

# Abstract

The response of public health agencies to the emergence of COVID-19 was delayed due to their inadequate assessment of the pathogens, which eventually resulted in the worldwide pandemic. From the repeated Freedom of Information Act revelations, it is now clear that some virologists knew as early as January 2020 that SARS-CoV-2, which caused the COVID-19 pandemic, had anomalous features different from those of past zoonotic viruses, such as the insertion of a furin cleavage site, which had never been found in Sarbecoviruses before the emergence of SARS-CoV-2, and the receptor binding domain best fit to a human receptor from the onset of the pandemic. Despite this acknowledgment, the virologists did not sound an alarm about the risk of the newly emerging pathogen that appeared extremely infectious as if they had been created artificially in a laboratory to enhance its transmissibility among humans. Had the early covert communications among virologists, after they noticed the anomaly in the sequence of SARS-CoV-2, been made public immediately, public health authorities could have decided to restrict international transportation to contain the virus in late January or early February 2020, which could have saved millions of lives. A fundamental reform to rectify the secretive culture of life science is needed for the prevention and mitigation of future pandemics.

## Introduction

At the onset of the COVID-19 pandemic, public health authorities, both domestic and international, failed to convey urgent information with adequate speed and accuracy on the newly emerging virus.

According to a letter sent to House Energy and Commerce Committee Chair Cathy McMorris Rodgers in December 2023 [1], Lili Ren of the Institute of Pathogen Biology at the Chinese Academy of Medical Sciences and Peking Union Medical College submitted a genetic sequence of SARS-CoV-2 to GenBank as early as December 28, 2019, which lacked the necessary information required for publication and was removed consequently. This fact contradicts the claim by the Chinese government that the pathogen of the Wuhan pneumonia outbreak had not yet been identified near the end of the first week of January 2020.

It was two weeks later, on January 12, 2020, that the first SARS-CoV-2 sequence was published on GenBank based on a submission by another Chinese researcher, which was one day after the World Health Organization (WHO) said it had received the sequence from China.

On January 14, 2020, the WHO posted on its official Twitter (currently X) account "Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to-human transmission of the novel #coronavirus (2019-nCoV) identified in #Wuhan, #China" [2]. On February 2, 2020 the WHO posted on Twitter "Asymptomatic #2019nCoV infection may be rare, and transmission from an asymptomatic person is very rare with other coronaviruses, as we have seen with MERS. Thus, transmission from asymptomatic cases is likely not a major driver of transmission" [3]. Both of these posts soon turned out to be misinformation. On March 29, 2020, the WHO posted on Twitter "FACT: #COVID19 is NOT airborne" [4], which also turned out to be false [5].

In March 2021, the WHO published a report of joint WHO-China study, which claimed that "introduction through a laboratory incident was considered to be an extremely unlikely pathway" [6]. However, after two years of investigation, including repeated Congressional hearings and transcribed interviews, the U.S. House Subcommittee on the Coronavirus Pandemic released a report in December 2024 [7], which concludes that COVID-19 most likely originated from the Wuhan lab in China.

Following this report, several whistleblowers confessed to having knowledge of the lab origin of COVID-19 without concealing their identities. Jon Myers, who had been a Marine Corps officer

for 28 years and joined the Pentagon in 2018, claimed Joint Chiefs of Staff had been briefed about a lab leak in China as early as October 2019 [8]. It was also reported that several scientists in government agencies, including Jason Bannan of the Federal Bureau of Investigation (FBI), and John Hardham, Robert Cutlip, and Jean-Paul Chretien of the National Center for Medical Intelligence (NCMI) at the Defense Intelligence Agency (DIA), had found evidence of human manipulation in SARS-CoV-2 [9]. In January 2025, the CIA (Central Intelligence Agency) updated its assessment, pointing to a lab leak as the most likely source of COVID-19 [10], which aligns with previous assessments by the FBI and the DOE (Department of Energy).

The large amount of incorrect information concerning the COVID-19 pandemic came not only from the authorities of the Chinese government or the WHO, but also from academia as a whole. The expertise of virology has not been used to prevent the spread of the virus because of the cover-up of virologists, which is suspected to have caused millions of deaths worldwide. In this paper, the author reviews what the virologists knew in the early days of the pandemic and how the cover-up influenced the spread of COVID. The author also reviews the history of cover-up in microbiology and discusses how to restore transparency for the betterment of public health in the future.

#### Cover-up by virologists

On January 8 and 9, 2024, Select Subcommittee on the Coronavirus Pandemic of the United States (US) House had a two-day transcribed interview with Anthony Fauci, who is the former Director of the National Institute of Allergy and Infectious Diseases (NIAID). According to the testimony takeaways provided by the Select Subcommittee [11], Fauci acknowledged that the COVID-19 lab-leak hypothesis is not a conspiracy theory. On January 14, the Select Subcommittee released the information that Francis Collins, the former Director of the National Institute of Health (NIH), agreed with Dr. Fauci's concession.

On January 18, 2024, the U.S. Right to Know (USRTK) released an early draft of US-China research grant proposal called "DEFUSE" obtained through the Freedom of Information Act (FOIA) [12], which included a detailed blueprint to synthesize a SARS-CoV-2-like virus. The blueprint, which plans to synthesize a SARS-like virus from six pieces using restriction enzymes including BsmBI and to insert a furin cleavage site between S1 and S2 units of the spike protein, perfectly aligns with the analysis of the paper by three researchers titled "Endonuclease fingerprint indicates a synthetic origin of SARS-CoV-2." Some scientists evaluate this document as a smoking gun of the lab-leak theory.

There has been a huge debate on whether the original SARS-CoV-2 virus strain came from a natural spill-over or an accidental lab-leak. As early as February 2020, a statement by 27 researchers was published in the Lancet [13], claiming "We stand together to strongly condemn conspiracy theories suggesting that COVID-19 does not have a natural origin" [14]. However, a great deal of evidence suggests that virologists knew that the SARS-CoV-2 virus, which caused COVID-19, included genomic features that natural viruses do not have in the very early days of the pandemic.

In an email to Fauci on January 31, 2020, which was made public through a FOIA request, Kristian Andersen wrote "The unusual features of the virus make up a really small part of the genome (<0.1%) so one has to look really closely at all the sequences to see that some of the features (potentially) look engineered" [15]. The features he noticed are supposed to be the receptor binding domain (RBD) best adapted to human ACE2 receptors from the onset of the pandemic [16] and the insertion of a furin cleavage site between the S1 and S2 subunits of the spike protein [17].

Indeed, as early as February 2, 2020, in a FOIA-ed email to Fauci and Collins from Jeremy Farrar, who was one of the authors of the Lancet statement in February 2020, they shared the views by Michael Farzan, who said "a likely explanation could be something as simple as passage SARS-live CoVs in tissue culture on human cell lines (under BSL-2) for an extended period of time, accidently creating a virus that would be primed for rapid transmission between humans via gain of furin site (from tissue culture) and adaption to human ACE2 receptor via repeated passage" [18].

Contrary to their early communications, Andersen et al., prompted by Fauci, published a paper on March 2020 in Nature Medicine [19], which concludes "Our analyses clearly show that SARS-CoV-2 is not a laboratory construct or a purposefully manipulated virus." Andersen and one of his co-authors, Robert Garry, testified in the US Congressional Hearing, on July 11, 2023 [20], where they answered they had changed their minds between the email and the publication of the paper when asked about the discrepancy between their private and public writings.

After the hearing, however, a trove of Slack messages between Andersen and his fellow virologists was revealed [21], where Andersen wrote on April 16, 2020 "We can't fully disprove culture... We also can't rule out engineering... furin site still could have been inserted via gibson assembly," which clearly shows he did not change his mind even after the publication of the Nature Medicine paper. Since then, many virologists co-authored papers insisting on zoonotic

origin of SARS-CoV-2 in major journals [22-24], which have been challenged for poor handling of data by follow-up studies [25,26].

In the draft of the DEFUSE proposal the USRTK obtained through a FOIA request to the US Geological Survey (USGS), the following comments were spotted, one from Peter Daszak of the Ecohealth Alliance and the other from Ralph Baric of the University of North Carolina.

"Ralph, Zhengli. If we win this contract, I do not propose that all of this work will necessarily be conducted by Ralph, but I do want to stress the US side of this proposal so that DARPA are comfortable with our team. Once we get the funds, we can then allocate who does what exact work, and I believe that a lot of these assays can be done in Wuhan as well...," wrote Daszak.

"In the US, these recombinant SARS CoV are studied under BSL3, not BSL2, especially important for those that are able to bind and replicate in primary human cells. In china, might be growin[g] these virus under bsl2. US resea[r]chers will likely freak out," wrote Baric.

All the above documents uncovered through the FOIA requests show the secretive culture in the public health officials and virologists in general. To make matters worse, the successive revelations of these documents are prompting the public health officials to hide the information so that they can circumvent FOIA. In an email sent in September 2021, David M. Morens, a high-ranking NIH official, wrote "As you know, I try to always communicate on gmail because my NIH email is FOIA'd constantly" [27].

#### The influence of cover-up

To prevent the spread of pathogens, an early response for their containment is critical. Nikolai Petrovsky, who discovered that the RBD of SARS-CoV-2 has the greatest affinity to human ACE2 receptor [28], said in an interview with Sharri Markson [29] that we had an opportunity in January, 2020 to eradicate this virus out of the whole human population. From this point of view, the two-week delay in publishing the sequence of SARS-CoV-2 had a great impact on the failure of the worldwide response to contain the virus. Though the Chinese government is to be blamed for this delay, it is quite likely that we still had chance to mitigate the damage even after the late publication of the SARS-CoV-2 sequence.

According to Markson's book titled "What really happened in Wuhan" [30], Robert O'Brien, Trump's National Security Advisor, encouraged his European counterparts to apply travel ban from China as the US, Australia, and New Zealand did in the beginning of February, 2020, which was not realized in spite of his advice. "Ultimately, what happened is the Chinese banned travel internally but they continued to allow folks from Wuhan and Hubei to go to Europe and ultimately most of the infection that took place in the US came from Europe through JFK, because the Europeans allowed in massive numbers of Chinese travellers. Had the Europeans taken the same approach as the US, Australia and New Zealand on the travel ban, this thing could have been contained in a much more aggressive fashion," O'Brien said to Markson.

One of the reasons why the response of the public health agencies was not fast enough in the beginning of the pandemic is that it usually takes time for a newly emerging pathogen to adapt to human infection, for the pathogen coming from zoonosis best fits to an intermediate host. Both SARS1 and MERS are known to be zoonotic pathogens, the former coming from civets and the latter coming from camels. Since they both took time to adapt to humans [16], they ended up in endemics, not pandemics. Public agencies had good reason to believe that it would also be the case with SARS2, later named COVID-19.

Had the early covert communications among virologists, conducted after they had analyzed the sequence of SARS-CoV-2, been made public in real-time, a wide range of people, including European public health authorities, could have been aware of the abnormal transmissibility of the virus. The pandemic could have been prevented by restricting international transportation to contain the virus in late January or in early February, which could have saved millions of lives.

## Culture of cover-up in microbiology

While virologists often insist that laboratories are well equipped to contain pathogens, numerous lab-leak accidents have happened historically and their frequency has increased with the recent spread of genetic engineering.

In the end of 2021, a researcher in Taiwan was bitten by a mouse in a BSL3 laboratory and became infected with the Delta variant of SARS-CoV-2, unknowingly spreading the disease around [31]. In this case, the incident was confirmed as a lab leak because the virus infection in Taiwan had been contained due to strict quarantine policies, which made it easier to identify the researcher as the source of infection. Had the lab leak taken place in a city with a higher number of infected patients, it would have remained unnoticed.

The leakage of a rare pathogen is generally easier to detect and is often reported. In August 2023, a researcher of the National Institute of Infectious Diseases (NIID) in Tokyo was infected with typhoid during an experiment and was subsequently hospitalized [32]. While the researcher in Taiwan infected with the Delta variant and her supervisor had to give up their positions at their research institution, no penalties have been reported for the researcher or the officials of the NIID. Surprisingly, only three months after the incident, the NIID announced that they would soon start an experiment involving Ebola viruses in Murayama, Tokyo [33], which is located in the midst of a highly populated area, as shown in Figure 1. A newly built BSL-4 laboratory, which the Japanese Cabinet decided to approve for operation in January 2025 [34], is also located on the campus of Nagasaki University in the middle of a densely populated area (Figure 2).

Unfortunately, lab accidents have been repeatedly covered up in the field of microbiology. According to a book by Alison Young [35], a member of a research team led by Yoshihiro Kawaoka at the University of Wisconsin accidentally pierced their finger with a needle containing an engineered H5N1 avian flu virus. Although Kawaoka had assured NIH officials that the university had a designated quarantine apartment, it actually did not have a dedicated quarantine facility. To cope with the emergency, the injured researcher was sent home to quarantine after family members had packed up their belongings and gone to a hotel.

In December 2019, another accident occurred in Kawaoka's lab. While two experienced researchers were assisting a colleague in collecting samples from ferrets infected with an engineered H5N1 virus or another wild-type flu strain, the powered air-purifying respirator hose of the trainee detached from the unit supplying safe, filtered air. This means that the trainee might have inhaled air contaminated with the engineered virus. A lab compliance official did not follow the lab's quarantine procedure and released the trainee prematurely. Following this accident, the university did not notify local or state public health officials about the incident or consult with them before discontinuing the trainee's quarantine.

After these revelations by Alison Young, the State of Wisconsin is planning legislation to ban gain-of-function research. If this law is passed, Kawaoka would need to relocate his gain-of-function research to another laboratory.

Kawaoka is renowned for his work in 2011 when his team created H5N1 viruses that gained the ability to cause airborne infection among ferrets [36], the animal model used to study how flu viruses behave in humans. Kawaoka has research bases not only at the University of Wisconsin but also at the University of Tokyo.

Kawaoka is heavily funded by the Japanese government. The UTOPIA project led by Kawaoka is scheduled to receive a total of 7.8 billion yen from the Japan Agency for Medical Research and Development (AMED) from fiscal year 2022 to 2026 [37]. To survey whether any gain-of-function research is included in the research plan, the author filed a FOIA request on the UTOPA project proposal document, which was heavily redacted, as shown in Figure 3.

Japanese public health authorities lack transparency in general. The Ministry of Health, Labour and Welfare of Japan used to publish the number of COVID death cases in the vaccinated and the unvaccinated groups in the early days of the vaccination program but stopped publishing the data as the COVID death ratio rose in the vaccinated group.

It is often the case that the public health officials are not cooperative in sharing information, a situation not limited to Japan. The NIH also redacted most of the requested information upon repeated FOIA requests. It was the USGS that ultimately shared critical information on the origin of COVID. We had to wait for four years before this revelation.

# Proximal origin of cover-up culture

Where does the secretive culture of virology originate? One of the most convincing answers to this question is Unit 731, a covert biological and chemical warfare research and development unit of the Imperial Japanese Army led by Shiro Ishii, which engaged in lethal human experimentation and biological weapons manufacturing during World War II [38].

In the Nuremberg trials, 23 medical doctors were accused of having been involved in Nazi human experimentation and mass murder under the guise of euthanasia [39], with seven receiving death sentences and nine receiving prison sentences. In the Tokyo tribunals, however, Ishii was granted immunity in exchange for their full disclosure and was hired by the U.S. government to provide American officers at Camp Detrick (currently Fort Detrick) with the findings through human experimentations related to biological weapons conducted by Unit 731 [40]. Thus, the inhumane and secretive culture of Unit 731 was inherited by the microbiologists in the U.S.

The same culture was carried over to the virologists in the Wuhan Institute of Virology along with technology provided by Ralph Baric and funding provided by the National Institute of Health through the EcoHealth Alliance led by Daszak. Recently, a HKU4-related-MERS chimera was identified contaminating agricultural rice RNA sequencing datasets from Wuhan, China [41], suggesting another covert bioweapon project.

The former team members of Unit 731, who all received immunity like Ishii, infiltrated the academic community of microbiology in Japan after World War II [42], passing on the culture of Unit 731 to the next generation. One of the main institutions where they worked was the Institute of Infectious Diseases at the University of Tokyo, which was later divided into the National Institute of Infectious Diseases and the Institute of Medical Science at the University of Tokyo, where Kawaoka is currently affiliated.

Thus, the corruption in microbiology can be traced back to the Imperial Japanese Army that nurtured Unit 731 and the U.S. government that unduly granted Ishii immunity in exchange for information on its biological warfare program.

#### Future work to be done

On January 3, 2024, 78 virologists coauthored a commentary where they denied the lab leak of SARS-CoV-2 and opposed the expansion of oversight over virology research recommended by the National Science Advisory Board for Biosecurity (NSABB) [43]. They claim that stringent rules slow research progress in virology to prepare for a future pandemic. However, there are different views on whether gain-of-function research to enhance the virulence or transmissibility of viruses can contribute to preparation for pandemics [44]. Kevin Esvelt claimed in his testimony at the Senate hearing on August 3, 2022, that the risk of manipulating a virus to enhance its pathogenicity outweighs the benefit [45].

Putting these controversies aside, one thing is quite certain: knowledge obtained through virology research is useless unless it is utilized in the face of a pandemic. The virologists who have been heavily funded for the purpose of pandemic prediction and preparedness, such as the USAID-funded PREDICT project [46], did not immediately share their knowledge that SARS-CoV-2 posed a great risk of a pandemic with its anomalous adaptation to human infections. They are accountable for their cover-up.

Even if the risk of gain-of-function research is deemed worth taking to prepare for future pandemics, it should be conducted by a new generation of open-minded researchers. The virologists who have conspired to cover-up critical information must be removed from the academic community.

What is needed to prevent the next pandemic is not to allocate more research grants to clandestine

virologists but to immediately open all the communications among virologists who are funded for the purpose of pandemic prediction and preparedness with taxpayers' money in case of an emergency. One possible concern is that they can circumvent FOIA by using unofficial communication routes, as David M. Morens intended in his e-mail. An inescapable strict penalty should be imposed for this kind of conduct. From that point of view, it is regrettable that Anthony Fauci was granted a presidential pardon [47], as it could cause a moral hazard in the virology community.

In the case of forensic investigation, prosecutors are allowed to raid the suspect if an investigation warrant is issued by the judiciary. A compulsory investigation is permitted when circumstantial evidence strongly supports the prosecutor's claim, whether the incident is accidental or intentional. The same rule should apply to the activities of scientists that can harm the public. Hesitation and delay of investigation can lead to recurrence of the same disaster. A typical example is the Tokyo subway sarin attack in 1995 by members of the cult movement Aum Shinrikyo, which occurred nine months after the Matsumoto sarin attack by the same cult. Sarin was synthesized by young scientists who belonged to Aum Shinrikyo in a secretive facility called "Sathyan". Had a forced investigation into their facility been executed immediately after the Matsumoto sarin attack, the casualties of the Tokyo subway sarin attack would not have been inflicted by the act of terrorism.

To uncover the truth about what transpired among public health officials and the community of virologists during the pandemic, a thorough investigation should be carried out by an independent organization without any conflict of interest. An agency like the IAEA (International Atomic Energy Agency) for atomic engineering, which is free from reputation risks even when they find something wrong, should be established for oversight. Without this kind of drastic reform, we are likely to repeat the same failure in preventing and mitigating the next pandemic, which may claim millions of lives worldwide again in the near future.

#### **Competing interests**

None declared.

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Figure 1. Location of the NIID Murayama Branch (satellite photo from Google Maps).



Figure 2. Location of the newly built BSL-4 laboratory in Nagasaki University (satellite photo from Google Maps).



Figure 3. The research plan of the UTOPIA project from fiscal years 2022 to 2024 obtained upon FOIA request to the AMED by the author.