

OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE
WASHINGTON, DC

December 7, 2023

Hana Mensendiek
US Right to Know
4096 Piedmont Avenue, #963
Oakland, CA 94611-5221

Re: Litigation 23-cv-01055 | ODNI FOIA Case DF-2023-00241

Ms. Mensendiek,

This letter is the first interim response to your Freedom of Information Act (FOIA) request, dated 26 June 2023 and received by the Information Management Office (IMO) on 27 June 2023 (Enclosure 1), in which you requested four (4) explicitly segregated items of information concerning the Wuhan Institute of Virology.

Your request is being processed in accordance with the FOIA, 5 U.S.C. § 552, as amended. This response addresses the processing of three (3) documents responsive to your aforementioned request (Bates Pages: 23-cv-01055 (DF-2023-00241) 000001 – 000035). Of those documents, one (1) is being withheld in full (Bates Pages: 23-cv-01055 (DF-2023-00241) 000001 – 000003), pursuant to the following FOIA exemptions:

- (b)(1), which applies to information that is currently and properly classified pursuant to Executive Order 13526, Sections 1.4(c), 1.4(d), and 1.4(e); and
- (b)(3), which applies to information exempt from disclosure by statute, and, in this case, specifically the National Security Act of 1947, as amended, statute 50 U.S.C. § 3024(i), which protects intelligence sources and methods.

Additionally, we have determined that one (1) document is being released to you in part, pursuant to the FOIA exemptions detailed above (Enclosure 2; Bates Pages: 23-cv-01055 (DF-2023-00241) 000004 – 000013).

Finally, we have determined that one (1) document (Bates Pages: 23-cv-01055 (DF-2023-00241) 000014 – 000035) falls under the purview of another government agency. We have referred that one (1) document to that agency for their review and direct response to you.

If you have any questions, your attorney may contact Attorney Rebecca Levenson of the Department of Justice at (703) 299-3760 or via e-mail at rebecca.s.levenson@usdoj.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Koch", with the letters "for" written below it.

Gregory M. Koch
Chief, Information Management Office
FOIA Public Liaison

Enclosures

Enclosure 1

From: Hana Mensendiek <hana@usrtk.org>
Sent: Friday, July 7, 2023 1:28 PM
To: DNI-FOIA
Cc: Gary Ruskin
Subject: Re: Freedom of Information Act request
Attachments: Revised request 7.7.23.pdf

Dear FOIA officer:

Thank you for reviewing our FOIA request. We have revised our request to include time frames for Part I, III, and IV, as well as a beginning date for the time frame of Part II. We have also indicated that we are seeking non COVID-19-related coronavirus research for Part II. Thank you for confirming.

Please see attached for the revised request, and do tell us if there is any more we can do to assist in processing the request.

Thank you for your work in filing our request.

Sincerely,

Hana Mensendiek
U.S. Right to Know

On Fri, Jul 7, 2023 at 11:14 AM DNI-FOIA <DNI-FOIA@dni.gov> wrote:

Good afternoon,

Upon review, please provide a time frame for Parts I, III, and IV of the request.

Separately, we are interpreting Part II to be seeking *non COVID-19-related* coronavirus research – please let us know if this is incorrect.

Additionally, the requested timeframe for Part II covers a 15 year period – searching over such a long time frame would likely greatly increase the processing time necessary for any records responsive to your request.

Thank you,

DNI-FOIA

From: Hana Mensendiek <hana@usrtk.org>
Sent: Monday, June 26, 2023 5:18 PM
To: DNI-FOIA <DNI-FOIA@dni.gov>
Cc: Gary Ruskin <gary@usrtk.org>
Subject: Freedom of Information Act request

Dear Mr. Koch:

Please see the attached Freedom of Information Act request.

Please contact me with any questions or concerns.

Thanks so much for your help in filling this request.

Sincerely,

Hana Mensendiek

U.S. Right to Know



U.S. RIGHT TO KNOW

Pursuing truth and transparency for public health

July 7, 2023

Gregory Koch
Director, Information Management Office
ATTN: FOIA/PA
Office of the Director of National Intelligence
Washington, D.C. 20511

Via email: dni-foia@dni.gov

RE: Freedom of Information Act request

Dear Mr. Koch:

This is a four-part request under the Freedom of Information Act, 5 U.S.C. § 552, et seq., to the Office of the Director of National Intelligence (ODNI) related to intelligence about the origins of COVID-19. This request supersedes U.S. Right to Know's Freedom of Information Act request filed on June 26, 2023 to the ODNI.

Public Law No. 118-2 (COVID-19 Origin Act of 2023) requires ODNI to "declassify any and all information relating to potential links between the Wuhan Institute of Virology and the origin of the Coronavirus Disease 2019 (COVID-19)." The deadline for such was June 18, 2023. Accordingly, we interpret all records requested below (except for those necessary to protect ODNI's sources and methods) as declassified, and not subject to exemption under 5 U.S.C. § 552 (b)(1).

Part I. We seek the production of all records showing activities performed by the Wuhan Institute of Virology with or on behalf of the People's Liberation Army.

The time frame covered by Part I of this request is January 1, 2017 to January 1, 2020.

Part II. We seek all records that refer to coronavirus research (non-COVID 19) or other related activities performed at the Wuhan Institute of Virology between January 1, 2017 and January 1, 2020.

Part III. We seek records of intelligence referring to researchers at the Wuhan Institute of Virology who fell ill in autumn 2019. This includes, of any such researcher: (i) the researcher's name; (ii) the researcher's symptoms; (iii) the date of the onset of the researcher's symptoms; (iv) the researcher's role at the Wuhan Institute of Virology; (v) whether the researcher was involved with or exposed to coronavirus research at the Wuhan Institute of Virology; (vi) whether the researcher visited a hospital while they were ill; and (vii) a description of any other

actions taken by the researcher that may suggest they were experiencing a serious illness at the time.

The time frame covered by Part III of this request is August 1, 2019 to the present.

Part IV. We seek all other records of intelligence not captured in Parts 1-3 of this FOIA, which are properly declassified under Public Law No. 118-2, relating to potential links between the Wuhan Institute of Virology and the origin of the Coronavirus Disease 2019 (COVID-19).

The time frame covered by Part IV of this request is January 1, 2017 to the present.

We request that you disclose these documents and materials as they become available to you, without waiting until all the documents have been assembled. If documents are denied in whole or in part, please specify which exemption(s) is (are) claimed for each passage or whole document denied. Give the number of pages in each document and the total number of pages pertaining to this request and the dates of documents withheld. We request that excised material be "blacked out" rather than "whited out" or cut out and that the remaining non-exempt portions of documents be released as provided under the Freedom of Information Act.

Please advise of any destruction of records and include the date of and authority for such destruction. As we expect to appeal any denials, please specify the office and address to which an appeal should be directed.

REQUEST FOR FEE WAIVER

FOIA was designed to provide citizens a broad right to access government records. FOIA's basic purpose is to "open agency action to the light of public scrutiny," with a focus on the public's "right to be informed about what their government is up to." *NARA v. Favish*, 541 U.S. 157, 171 (2004) quoting *U.S. Dep't of Justice v. Reporters Comm. for Freedom of Press*, 489 U.S. 749, 773-74 (1989) (internal quotation and citations omitted). In order to provide public access to this information, FOIA's fee waiver provision requires that "[d]ocuments shall be furnished without any charge or at a [reduced] charge," if the request satisfies the standard. 5 U.S.C. § 552(a)(4)(A)(iii). FOIA's fee waiver requirement is "liberally construed." *Judicial Watch, Inc. v. Rossotti*, 326 F.3d 1309, 1310 (D.C. Cir. 2003); *Forest Guardians v. U.S. Dept. of Interior*, 416 F.3d 1173, 1178 (10th Cir. 2005).

The 1986 fee waiver amendments were designed specifically to provide non-profit organizations such as U.S. Right to Know access to government records without the payment of fees. Indeed, FOIA's fee waiver provision was intended "to prevent government agencies from using high fees to discourage certain types of requesters and requests," which are "consistently associated with requests from journalists, scholars, and *non-profit public interest groups*." *Ettlinger v. FBI*, 596 F. Supp. 867, 872 (D. Mass. 1984) (emphasis added). As one Senator stated,

“[a]gencies should not be allowed to use fees as an offensive weapon against requesters seeking access to Government information” 132 Cong. Rec. S. 14298 (statement of Senator Patrick Leahy).

I. U.S. Right to Know Qualifies for a Fee Waiver.

Under FOIA, a party is entitled to a fee waiver when “disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the [Federal] government and is not primarily in the commercial interest of the requester.” 5 U.S.C. § 552(a)(4)(A)(iii).

Thus, the ODNI must consider six factors to determine whether a request is in the public interest: (1) whether the subject of the requested records concerns “the operations or activities of the Federal government,” (2) whether the disclosure is “likely to contribute” to an understanding of government operations or activities, (3) whether the disclosure “will contribute to public understanding” of a reasonably broad audience of persons interested in the subject, (4) whether the disclosure is likely to contribute “significantly” to public understanding of government operations or activities. *Id.* § 2.107(1)(2), (5) whether a commercial interest exists and its magnitude, and (6) the primary interest in disclosure. As shown below, U.S. Right to Know meets each of these factors.

A. The Subject of This Request Concerns “The Operations and Activities of the Government.”

The subject matter of this request concerns the operations and activities of the United States Intelligence Community (IC), which the ODNI oversees. This request is about potential links between the Wuhan Institute of Virology and the origin of the COVID-19, which Congress required ODNI to declassify.

This FOIA will provide U.S. Right to Know and the public with crucial insight into the activities of the ODNI in relation to the US Government’s efforts to understand the origins of the COVID-19 pandemic. It is clear that a federal agency’s oversight of health, safety and security threats, both foreign and in the U.S. is a specific and identifiable activity of the government, and in this case it is the executive branch agency of the ODNI. *Judicial Watch*, 326 F.3d at 1313 (“[R]easonable specificity is all that FOIA requires with regard to this factor”) (internal quotations omitted). Thus, U.S. Right to Know meets this factor.

B. Disclosure is “Likely to Contribute” to an Understanding of Government Operations or Activities.

The requested records are meaningfully informative about government operations or activities and will contribute to an increased understanding of those operations and activities by the public.

Disclosure of the requested records will allow U.S. Right to Know to convey to the public information about the ODNI’s activities in relation to the Intelligence Community’s investigations into the origins of COVID-19, as well the extent of its compliance with federal law. Once the information is made available, U.S. Right to Know will analyze it and present it to the general public in a manner that will meaningfully enhance the public’s understanding of this topic.

Thus, the requested records are likely to contribute to an understanding of the ODNI’s operations and activities.

C. Disclosure of the Requested Records Will Contribute to a Reasonably Broad Audience of Interested Persons’ Understanding of the origins of the COVID-19 Pandemic

The requested records will contribute to public understanding of whether the ODNI’s actions relating to concerns about origins of COVID-19 were consistent with its mission to “lead the IC in intelligence integration, forging a community that delivers the most insightful intelligence possible”. As explained above, the records will contribute to public understanding of this topic.

Activities of the ODNI generally, and specifically its activities to investigate the origins of the COVID-19 pandemic are areas of interest to a reasonably broad segment of the public. U.S. Right to Know will use the information it obtains from the disclosed records to educate the public at large about this topic. *See W. Watersheds Proj. v. Brown*, 318 F. Supp.2d 1036, 1040 (D. Idaho 2004) (finding that “WWP adequately specified the public interest to be served, that is, educating the public about the ecological conditions of the land managed by the BLM and also how ... management strategies employed by the BLM may adversely affect the environment”).

Through U.S. Right to Know’s synthesis and dissemination (by means discussed in Section II, below), disclosure of information contained in and gleaned from the requested records will contribute to a broad audience of persons who are interested in the subject matter. *Ettlinger v. FBI*, 596 F. Supp. at 876 (benefit to a population group of some size distinct from the requester alone is sufficient); *Carney v. Dept. of Justice*, 19 F.3d 807, 815 (2d Cir. 1994), *cert. denied*, 513 U.S. 823 (1994) (applying “public” to require a sufficient “breadth of benefit” beyond the requester’s own interests); *Cmty. Legal Servs. v. Dep’t of Hous. & Urban Dev.*, 405 F. Supp.2d 553, 557 (E.D. Pa. 2005) (in granting fee waiver to community legal group, court noted that

while the requester’s “work by its nature is unlikely to reach a very general audience,” “there is a segment of the public that is interested in its work”).

Indeed, the public does not currently have an ability to easily evaluate the requested records, which are not currently in the public domain because information contained in the ODNI report titled “The Potential Links Between the Wuhan Institute of Virology and the Origin of the COVID-19 Pandemic”, released June 23, 2023, was incomplete and failed to comply with requirements set forth by Congress to release “any and all” information on the topic. *See Cmty. Legal Servs.*, 405 F. Supp.2d at 560 (because requested records “clarify important facts” about agency policy, “the CLS request would likely shed light on information that is new to the interested public.”). As the Ninth Circuit observed in *McClellan Ecological Seepage Situation v. Carlucci*, 835 F.2d 1282, 1286 (9th Cir. 1987), “[FOIA] legislative history suggests that information [has more potential to contribute to public understanding] to the degree that the information is new and supports public oversight of agency operations... .”¹[1]

Disclosure of these records is not only “likely to contribute,” but is certain to contribute, to public understanding of ODNI’s activities toward finding the origins of the COVID-19 pandemic. The public is always well served when it knows how the government conducts its activities, particularly matters touching on legal questions. Hence, there can be no dispute that disclosure of the requested records to the public will educate the public about this pressing issue.

II. Disclosure is Likely to Contribute Significantly to Public Understanding of Government Operations or Activities.

U.S. Right to Know is not requesting these records merely for their intrinsic informational value. Disclosure of the requested records will significantly enhance the public’s understanding of what the ODNI knows about the origins of SARS-CoV-2 and of institutions that conducted coronavirus research in Wuhan, China. The records are also certain to shed light on the ODNI’s compliance with its own mission and purpose, as well as its compliance with federal law. Such public oversight of agency action is vital to our democratic system and clearly envisioned by the drafters of the FOIA. Thus, U.S. Right to Know meets this factor as well.

III. Obtaining the Requested Records is of No Commercial Interest to U.S. Right to Know

Access to government records, disclosure forms, and similar materials through FOIA requests is essential to U.S. Right to Know’s role of educating the general public. Founded in 2014, U.S. Right to Know is a 501(c)(3) nonprofit public interest, public health organization (EIN: 46-5676616). U.S. Right to Know has no commercial interest and will realize no commercial benefit from the release of the requested records.

IV. U.S. Right to Know's Primary Interest in Disclosure is the Public Interest.

As stated above, U.S. Right to Know has no commercial interest that would be furthered by disclosure. Although even if it did have an interest, the public interest would far outweigh any pecuniary interest¹.

U.S. Right to Know is a non-profit organization that informs, educates, and counsels the public regarding corporate wrongdoing and government failures that threaten the integrity of our food system, our environment and our health. U.S. Right to Know has been substantially involved in the activities of numerous government agencies for over eight years, and has consistently displayed its ability to disseminate information granted to it through FOIA.

In granting U.S. Right to Know's fee waivers, agencies have recognized: (1) that the information requested by U.S. Right to Know contributes significantly to the public's understanding of the government's operations or activities; (2) that the information enhances the public's understanding to a greater degree than currently exists; (3) that U.S. Right to Know possesses the expertise to explain the requested information to the public; (4) that U.S. Right to Know possesses the ability to disseminate the requested information to the general public; (5) and that the news media recognizes U.S. Right to Know as an established expert in the field of public health. U.S. Right to Know's track record of active participation in oversight of governmental activities and decision making, and its consistent contribution to the public's understanding of those activities as compared to the level of public understanding prior to disclosure are well established.

U.S. Right to Know intends to use the records requested here similarly. U.S. Right to Know's work appears frequently in news stories online and in print, radio and TV, including reporting in outlets such as *The New York Times* and *The Guardian*, as well as medical and public health journals such as the *BMJ*. Many media outlets have reported about the food and chemical industries using information obtained by U.S. Right to Know from federal agencies. In 2022, more than 725,000 people visited U.S. Right to Know's extensive website, and viewed pages more than one million times. U.S. Right to Know and its staff regularly tweet to a combined following of nearly 50,000 on Twitter, and more than 9,600 people follow U.S. Right to Know on Facebook. U.S. Right to Know intends to use any or all of these media outlets to share with the public information obtained as a result of this request.

Public oversight and enhanced understanding of the ODNI's duties is absolutely necessary. In determining whether disclosure of requested information will contribute significantly to public understanding, a guiding test is whether the requester will disseminate the information to a reasonably broad audience of persons interested in the subject. *Carney*, 19 F.3d 807. U.S. Right to Know need not show how it intends to distribute the information, because "[n]othing in FOIA, the [agency] regulation, or our case law require[s] such pointless specificity." *Judicial*

¹ In this connection, it is immaterial whether any portion of U.S. Right to Know's request may currently be in the public domain because U.S. Right to Know requests considerably more than any piece of information that may currently be available to other individuals. See *Judicial Watch*, 326 F.3d at 1315.

Watch, 326 F.3d at 1314. It is sufficient for U.S. Right to Know to show how it distributes information to the public generally. *Id.*

Please send the documents electronically in PDF format to hana@usrtk.org. If you need additional information please write Hana at the email address above.

Thank you so much for your help in filling this request.

Sincerely,



Hana Mensendiek
Investigator



Gary Ruskin
Executive Director

Enclosure 2

(b)(1), (b)(3)



OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

(U) Potential Links Between the Wuhan Institute of Virology and the Origin of the COVID-19 Pandemic

June 2023

(b)(3)

(b)(1), (b)(3)

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(U) EXECUTIVE SUMMARY

(U) This report responds to the COVID-19 Origins Act of 2023, which called for the U.S. Intelligence Community (IC) to declassify information relating to potential links between the Wuhan Institute of Virology (WIV) and the origin of the COVID-19 pandemic. This report outlines the IC's understanding of the WIV, its capabilities, and the actions of its personnel leading up to and in the early days of the COVID-19 pandemic. This report does not address the merits of the two most likely pandemic origins hypotheses, nor does it explore other biological facilities in Wuhan other than the WIV. A classified annex to this report includes information that was necessary to exclude from the unclassified portion of this report in order to protect sources and methods, but the information contained in the annex is consistent with the unclassified assessments contained in this report.

(U) This report was drafted by the National Intelligence Officer for Weapons of Mass Destruction and Proliferation and coordinated with the IC.

(U) IC ASSESSMENTS ON COVID-19 ORIGINS

(U) In March, the IC updated its analysis on core intelligence questions related to COVID-19 origins, to include whether the first human infection with SARS-CoV-2—the virus that causes COVID-19—was the result of natural exposure to an infected animal or a laboratory-associated incident. Variations in IC analytic views on the origins of the COVID-19 pandemic largely stem from differences in how agencies weigh intelligence reporting and scientific publications and intelligence and scientific gaps. All agencies continue to assess that both a natural and laboratory-associated origin remain plausible hypotheses to explain the first human infection.

- (b)(3) The National Intelligence Council and four other IC agencies assess that the initial human infection with SARS-CoV-2 most likely was caused by natural exposure to an infected animal that carried SARS-CoV-2 or a close progenitor, a virus that probably would be more than 99 percent similar to SARS-CoV-2.
- (b)(3) The Department of Energy and the Federal Bureau of Investigation assess that a laboratory-associated incident was the most likely cause of the first human infection with SARS-CoV-2, although for different reasons.
- (b)(3) The Central Intelligence Agency and another agency remain unable to determine the precise origin of the COVID-19 pandemic, as both hypotheses rely on significant assumptions or face challenges with conflicting reporting.
- (b)(3) Almost all IC agencies assess that SARS-CoV-2 was not genetically engineered. Most agencies assess that SARS-CoV-2 was not laboratory-adapted; some are unable to make a determination. All IC agencies assess that SARS-CoV-2 was not developed as a biological weapon.

(U) WIV ACTIVITIES PERFORMED WITH OR ON BEHALF OF THE PEOPLE'S LIBERATION ARMY

(b)(1), (b)(3) The WIV is a civilian research institute founded in the 1950s by the Chinese Academy of Sciences (CAS). Although the WIV is independent of the People's Liberation Army (PLA), the IC assesses that WIV personnel have worked with scientists associated with the PLA on public health-related research and collaborated on biosafety and biosecurity projects. Information available to the IC indicates that some of the research conducted by the PLA and WIV included work with several viruses, including coronaviruses, but no known viruses that could plausibly be a progenitor of SARS-CoV-2. For example, PLA researchers have used WIV laboratories for virology and vaccine-related work.

- (b)(1), (b)(3) Between 2017 and 2019, the WIV funded and some of its personnel conducted research projects to enhance China's knowledge of pathogens and early disease warning capabilities for defensive and biosecurity needs of the military.
- (U) (b)(3) Prior to collaborating on a vaccine for SARS-CoV-2, the WIV collaborated with the PLA on other vaccine and therapeutics relevant to coronaviruses. The IC assesses that this work was intended for public health needs

and that the coronaviruses known to be used were too distantly related to have led to the creation of SARS-CoV-2.

(U) CORONAVIRUS RESEARCH AND RELATED ACTIVITIES PERFORMED AT THE WIV

(b)(1), (b)(3) Prior to the pandemic, we assess WIV scientists conducted extensive research on coronaviruses, which included animal sampling and genetic analysis. We continue to have no indication that the WIV's pre-pandemic research holdings included SARS-CoV-2 or a close progenitor, nor any direct evidence that a specific research-related incident occurred involving WIV personnel before the pandemic that could have caused the COVID pandemic.

(U) WIV Coronavirus Research and Holdings

(b)(1), (b)(3) The WIV probably maintains one of the world's largest repositories of bat samples, which has enabled its coronavirus research and related public health support. Information available to the IC indicates that the WIV first possessed SARS-CoV-2 in late December 2019, when WIV researchers isolated and identified the virus from samples from patients diagnosed with pneumonia of unknown causes.

- (b)(1), (b)(3) In 2013, the WIV collected animal samples from which they identified the bat coronavirus RaTG13, which is 96.2 percent similar to the COVID-19 virus. By 2018, the WIV had sequenced almost all of RaTG13, which is the second closest known whole genome match to SARS-CoV-2, after BANAL-52, which is 96.8 percent similar. Neither of these viruses is close enough to SARS-CoV-2 to be a direct progenitor.
- (b)(1), (b)(3) Since 2019, some WIV researchers analyzed pangolin samples to better understand disease outbreaks in these animals.
- (b)(1), (b)(3) By the end of 2019, the WIV maintained distinct teams focused on MERS and SARS-related coronaviruses. Both teams separately used transgenic mouse models to better understand how the viruses infect humans as well as related vaccine and therapeutics research. The WIV then shifted to support broader public-health efforts related to the COVID-19 pandemic in early 2020.

(U) WIV Genetic Engineering Capabilities

(b)(1), (b)(3) We assess that some scientists at the WIV have genetically engineered coronaviruses using common laboratory practices. The IC has no information, however, indicating that any WIV genetic engineering work has involved SARS-CoV-2, a close progenitor, or a backbone virus that is closely-related enough to have been the source of the pandemic.

- (b)(1), (b)(3) Scientists at the WIV have created chimeras, or combinations, of SARS-like coronaviruses through genetic engineering, attempted to clone other unrelated infectious viruses, and used reverse genetic cloning techniques on SARS-like coronaviruses.

- (b)(1), (b)(3) Some of the WIV’s genetic engineering projects on coronaviruses involved techniques that could make it difficult to detect intentional changes. A 2017 dissertation by a WIV student showed that reverse genetic cloning techniques—which are standard techniques used in advanced molecular laboratories—left no traces of genetic modification of SARS-like coronaviruses.

(U) Biosafety Concerns at the WIV

(b)(1), (b)(3) Some WIV researchers probably did not use adequate biosafety precautions at least some of the time prior to the pandemic in handling SARS-like coronaviruses, increasing the risk of accidental exposure to viruses. Before the pandemic, the WIV had been working to improve at least some biosafety conditions and training. We do not know of a specific biosafety incident at the WIV that spurred the pandemic and the WIV’s biosafety training appears routine, rather than an emergency response by China’s leadership.

- (U) (b)(3) Nearly a year after the accreditation of the WIV’s BSL-4 laboratory in 2017, China’s decisions of which pathogens required higher biocontainment protocols remained opaque, while the facility had a shortage of appropriately trained personnel.
- (b)(1), (b)(3) In mid-2019, WIV officials were evaluating and implementing biosafety improvements, training, and procurements in the context of a growing body of broader biosecurity PRC legislation. In November 2019, the WIV, in cooperation with other CAS entities, hosted a biosafety training course for WIV and non-WIV personnel that included speakers from the China Centers for Disease Control and Prevention. Given the timing of the event, this training appears routine, rather than a response to a specific incident.
- (b)(1), (b)(3) As of January 2019, WIV researchers performed SARS-like coronavirus experiments in BSL-2 laboratories, despite acknowledgements going back to 2017 of these virus’ ability to directly infect humans through their spike protein and early 2019 warnings of the danger of this practice. Separately, the WIV’s plan to conduct analysis of potential epidemic viruses from pangolin samples in fall 2019, suggests the researchers sought to isolate live viruses.
- (b)(1), (b)(3) An inspection of the WIV’s high-containment laboratories in 2020—only months after the beginning of the COVID-19 outbreak’s emergence—identified a need to update aging equipment, a need for additional disinfectant equipment, and improvements to ventilation systems. As this inspection occurred in the midst of the WIV’s crisis response to the COVID-19 outbreak, these findings are not necessarily indicative of WIV’s biosafety status prior to the outbreak.

(U) WIV RESEARCHERS WHO FELL ILL IN FALL 2019

(b)(1), (b)(3) Several WIV researchers were ill in Fall 2019 with symptoms; some of their symptoms were consistent with but not diagnostic of COVID-19. The IC continues to assess that this information neither supports nor refutes either hypothesis of the pandemic's origins because the researchers' symptoms could have been caused by a number of diseases and some of the symptoms were not consistent with COVID-19. Consistent with standard practices, those researchers likely completed annual health exams as part of their duties in a high-containment biosafety laboratory. The IC assesses that the WIV maintains blood samples and health records of all of their laboratory personnel—which are standard procedures in high-containment laboratories.

- (b)(1), (b)(3) We have no indications that any of these researchers were hospitalized because of the symptoms consistent with COVID-19. One researcher may have been hospitalized in this timeframe for treatment of a non-respiratory medical condition.
- (b)(1), (b)(3) China's National Security Commission investigated the WIV in early 2020 and took blood samples from WIV researchers. According to the World Health Organization's March 2021 public report, WIV officials including Shi Zhengli—who leads the WIV laboratory group that conducts coronavirus research—stated lab employee samples all tested negative for SARS-CoV-2 antibodies.

(b)(1), (b)(3) While several WIV researchers fell mildly ill in Fall 2019, they experienced a range of symptoms consistent with colds or allergies with accompanying symptoms typically not associated with COVID-19, and some of them were confirmed to have been sick with other illnesses unrelated to COVID-19. While some of these researchers had historically conducted research into animal respiratory viruses, we are unable to confirm if any of them handled live viruses in the work they performed prior to falling ill.

(U) APPENDIX A: DEFINITIONS

(U) **Antibody:** A protein produced during an immune response to a part of an infectious agent called an antigen.

(U) **Backbone:** A genetic sequence used as a chassis upon which to build synthetic constructs, such as those used for cloning, protein expression, and production.

(U) **Biosafety:** The application of knowledge, techniques, and equipment to prevent personal, laboratory, and environmental exposure to potentially infectious agents or biohazards. Four **Biosafety levels (BSL)** define the containment conditions under which biological agents can be safely manipulated. These standards range from moderate safety requirements for low-risk agents (BSL-1), to the most stringent controls for high-risk agents (BSL-4). China's standards range from P1–4.

(U) **Biosecurity:** The protection, control of, and accountability for biological agents, toxins, and biological materials and information to prevent unauthorized possession, loss, theft, misuse, diversion, and accidental or intentional release.

(U) **Coronavirus:** A family of common viruses that can infect humans and/or animals. The human illness caused by most coronaviruses usually lasts a short time and presents symptoms consistent with the “common cold,” such as a runny nose, sore throat, cough, and fever.

(U) **COVID-19:** An infectious disease caused by the **SARS-CoV-2** virus, which is a betacoronavirus.

(U) **Diagnostic Information:** Information that allows IC analysts to distinguish between hypotheses—in this case, the laboratory origin and natural origin theories.

(U) **DNA (deoxyribonucleic acid):** A molecule that carries an organism's genetic blueprint for growth, development, function, and reproduction.

(U) **Gain-of-function:** The IC considers this as a research method that involves manipulating an organism's genetic material to impart new biological functions that could enhance virulence or transmissibility (e.g., genetically modifying a virus to expand its host range, transmissibility, or severity of illness). The IC assesses that genetic engineering, genetic modification, and laboratory-adaptation can all be used for gain-of-function experiments, but are not inherently so.

(U) **Genetically engineered or genetically modified viruses** are intentionally altered, created, or edited using biotechnologies, such as Clustered Regularly Interspaced Short Palindromic Repeat (CRISPR), DNA recombination, or reverse genetics. These viruses have intentional, targeted edits to the genome designed to achieve specific results, but unintentional genomic changes may also occur.

(U) **Genome:** The genetic material of an organism. It consists of DNA (and sometimes RNA for viruses).

(U) **Genome sequencing:** The process of determining the DNA or RNA sequence of an organism’s genome, or its “genetic code.” An organism’s genetic code is the order in which the four nucleotide bases—adenine, cytosine, guanine, and thymine—are arranged to direct the sequence of the 20 different amino acids in the proteins that determine inherited traits.

(U) **Intermediate species/host:** An organism that can be infected with a pathogen from a reservoir species and passes the pathogen to another host species; infection is not sustained in this population.

(U) **Laboratory-adapted viruses** have undergone natural, random mutations through human-enabled processes in a laboratory—such as repeated passage through animals or cells—that put pressure on the virus to more rapidly evolve. Specific changes to the viral genome are not necessarily anticipated in these processes, though the virus can be expected to gain certain characteristics, such as the ability to infect a new species. This is a common technique used in public health research of viruses. We consider directed evolution to be under laboratory adaptation.

(U) **Laboratory-associated incidents** include incidents that happen in biological research facilities or during research-related sampling activities.

(U) **Naturally occurring viruses** have not been altered in a laboratory. Viruses commonly undergo random mutations as part of the evolutionary process and can continue to change over time; mutations may enable a virus to adapt to its environment, such as evading host immune responses and promoting viral replication.

(U) **Outbreak:** A sudden increase in occurrences of a disease in a particular time and place. Outbreaks include **epidemics**, which is a term that is reserved for infectious diseases that occur in a confined geographical area. **Pandemics** are near-global disease outbreaks.

(U) **Pangolin:** An African and Asian mammal that has a body covered in overlapping scales. Pangolins are a natural reservoir of coronaviruses and researchers are investigating their potential role as an intermediate host for the COVID-19 virus.

(U) **Pathogen:** A bacterium, virus, or other microorganism that can cause disease.

(U) **Progenitor Virus:** A virus that is closely related enough—more than 99 percent—to SARS-CoV-2 to have been its direct ancestor or plausible immediate origin of the outbreak. The closest known relative to SARS-CoV-2 is only about 96 percent similar; to put this into context, humans and chimps are about 99 percent similar, demonstrating the significant differences even at this similarity.

(U) **Reverse genetics:** A process for determining the natural function of genes by introducing mutations and studying the effect of those mutations.

(U) **RNA (ribonucleic acid):** A molecule essential for gene coding, decoding, regulation, and expression. The genome of certain viruses, including coronaviruses, is made of RNA rather than DNA.

(U) **Virus:** A replicating piece of genetic material—DNA or RNA—and associated proteins that use the cellular machinery of a living cell to reproduce.

(U) **Zoonosis:** An infection or a disease that is transmissible from animals to humans under natural conditions. A **zoonotic pathogen** may be viral, bacterial, or parasitic, and can sometimes be transmitted through insects, such as mosquitoes.

(U) **Zoonotic spillover:** An initial infection or disease that is caused by contact between an animal and human under natural conditions.