Testimony of Professor Jeffrey Sachs Chairman of the Lancet Covid-19 Commission To the House Committee on Oversight and Accountability March 6, 2023

After more than three years of the Covid-19 pandemic, and more than 18 million deaths worldwide according to one authoritative estimate (IHME, 2023), we still do not know the origin of SARS-CoV-2, the virus that causes Covid-19. We do know, however, four things. First, the virus may have emerged from dangerous laboratory research. Second, this dangerous research was partly funded by the US Government, and notably NIH, so the dangerous research involved US-China collaboration. Third, the NIH leadership and a group of scientists associated with NIH hid the possibility of a laboratory origin from the Congress and the public. Fourth, the question of the origin of SARS-CoV-2 is not a partisan issue. While Republicans have taken the lead in exposing the possibility of a lab-related leak, Democrats should now join their Republican colleagues in a search for the truth.

During 2020-2022, I chaired the Lancet Covid-19 Commission. The Lancet Commission followed the evidence on origins closely and <u>concluded</u> that both a laboratory origin and a natural origin are possible. The Commission called for ongoing investigations, with urgency, of this issue. I strongly commend the US Congress, and specifically, the House Committee on Oversight and Accountability, for taking on this crucial task. It is truly in the public interest.

The issue of the origin is very important. If indeed the virus emerged from a laboratory, it reveals the remarkable danger of ongoing gain-of-function research largely unknown to the Congress and public. There is little if any oversight and accountability of such research, despite its dangers. In fact, very recently, researchers at Boston University genetically reengineered the Omicron Variant of SARS-CoV-2 in a manner that made it more pathogenic. Yet BU did not have any federal risk-benefit review or oversight for that dangerous work. US-government-funded gain-of-function research of concern is apparently underway in many locations—and is occurring without the federal risk-benefit review and oversight that, on paper, are mandated by

US policies but that, in practice, have been ignored by US research funding agencies. Since the US has a vast and largely secretive biodefense research program, additional US-government-funded gain-of-function research of concern may be underway to an extent that is unknown by the public and the Congress. This is not to mention the extent of such research in other parts of the world.

The reasons to believe that SARS-CoV-2 may have emerged from a laboratory are straightforward.

One reason concerns the presence in the SARS-CoV-2 genome of a sequence encoding a "Furin Cleavage Site" (FCS). SARS-CoV-2 is the only one of the hundreds of SARS-related viruses ("sarbecoviruses") that has an FCS sequence. The presence of the FCS sequence in SARS-CoV-2 dramatically increases the transmissibility and pathogenicity of the virus. At least since 2006, FCS sequences have been an active target of research by scientists studying coronaviruses, precisely because it has been anticipated that inserting an FCS sequence into coronavirus genomes would make coronaviruses more dangerous.

We know that in recent years US scientists had developed advanced techniques for inserting an FCS into a SARS-related coronavirus. Moreover, a partnership of US and Chinese scientists--notably at EcoHealth Alliance, the University of North Carolina, and the Wuhan Institute of Virology--submitted a grant proposal to DARPA in 2018, just one year before the pandemic emerged, that expicitly proposed doing this. The grant proposal was not funded by DARPA, but the research may have been, and quite possibly was, carried out using other resources.

Two basic facts are most concerning. First, NIH leaders, including former Director Francis Collins and Dr. Anthony Fauci, Director of the National Institutes for Allergies and Infectious Diseases (NIAID), kept the gain-of-function research hidden from the Congress and the public, and, indeed, repeated misled the Congress and the public about the subject. They did not properly disclose the NIH work that supported dangerous genetic manipulation of SARS-related

coronaviruses. They did not disclose the DARPA proposal and its possible relevance to the origin of SARS-CoV-2. In fact, the public learned of DARPA proposal only through a leak.

Moreover, Collins, Fauci, Jeremy Farrar (then the head of Wellcome Trust and now the Chief Scientist of WHO), and a group of scientists linked to NIH kept hidden from the public and Congress the possibility of a laboratory origin of the virus. They did this, in part, by producing a highly misleading paper, "The Proximal Origin of SARS-CoV-2," that deflected attention from the possibility of a laboratory origin. In arguing against the possibility of a laboratory origin the paper misleadingly states: "However, the genetic data irrefutably show that SARS-CoV-2 is not derived from any previously used virus backbone." The footnote 20, remarkably, is to a 2014 paper, used to rule out a laboratory origin of a 2020 pandemic!

Responsible scientists would have made clear that between 2014 and 2020, US and Chinese scientists had continued to collect and manipulate large numbers of previously unreported SARS-related coronaviruses. Yet instead of alerting the scientific community and public to these key unknowns, the authors of the "Proximal Origin" paper promoted the false claim that a laboratory origin of the virus could be ruled out.

Second, the dangerous research was undertaken collaboratively by US and Chinese researchers. Of course, the NIH does not know all that occurred in Chinese laboratories, but it does know much more than it has told the public and Congress about US-Chinese collaboration on the genetic manipulation of SARS-related viruses. The same is true for EcoHealth Alliance and the University of North Carolina.

Remarkably, and distressingly, there seems to have been no concerted effort to date by US agencies, especially the NIH, to collect all of the electronic databases of SARS-like viruses held by EcoHealth Alliance, UNC, other US research centers, and US government entities, to examine these databases for clues as to the possible origins, including possible laboratory origins, of SARS-CoV-2. This lack of scrutiny is especially disturbing and puzzling given that key databases

of SARS-related viruses have been built and maintained with NIH and other US-government funding.

In addition to the urgent scientific scrutiny of virus databases, laboratory records, and other evidence held by US government, academic, and NGO entities that could shed light on the origins of SARS-CoV-2, there are many other key questions about the origin of SARS-CoV-2 that should be investigated by the House Oversight Committee as part of its deeply important public service. Key questions include the following:

- 1) When did various parts of the US Government become aware of a new cluster of pneumonia-like disease in China or elsewhere in 2019?
- 2) As it was increasingly clear in late 2019 that a new SARS-like virus was likely in circulation, when did the US Government gather evidence of US-supported research on the genetic manipulation of SARS-like viruses, under NIH grants or otherwise?
- 3) What did Dr. Anthony Fauci inform the White House, Congress, and the public regarding the conclusions of the NIH conference call with scientists on February 1, 2020, notably that the presence of the FCS in SARS-CoV-2 made a laboratory origin a real possibility?
- 4) When did NIH first discuss internally the implications of DARPA proposal for the possible origin of SARS-CoV-2?
- 5) What did Dr. Ralph Baric, the world's leading scientist in the genetic manipulation of SARS-related coronaviruses, including the role of FCS, discuss with the NIH and other US government agencies early in the pandemic about the possibility of a laboratory origin?
- 6) On December 12, 2019, the UNC, NIH, and Moderna signed a "Material Transfer

 Agreement" (MTA) to share materials with regard to "mRNA coronavirus vaccine

 candidates." Was this timing a coincidence, or did Moderna, NIH, and UNC already know
 about the circulation of a new SARS-like virus as of mid-December 2019?
- 7) On January 13, 2020, NIH and Moderna announced a partnership to develop the mRNA-1273 vaccine against SARS-CoV-2, less than 2 days after the first posting of the genome of SARS-CoV-2, and weeks before any known cases of Covid-19 in the United States.

- When did NIH and Moderna first know about SARS-CoV-2, and how did they reach an agreement to go into Phase I trials of a specific mRNA vaccine within two days of the posting of the genome of the new virus?
- 8) In what ways did Drs. Francis Collins, Anthony Fauci, and Jeremy Farrar engage with the authors of "Proximal Origins"?
- 9) When were the authors of "Proximal Origins" first told by NIH or other US Government agencies about the DARPA proposal and other ongoing USG-supported gain-of-function research on SARS-like viruses?
- 10) Why did the authors of "Proximal Origins" fail to make clear that US and Chinese scientists were actively manipulating SARS-related coronaviruses, and why did they fail to re-address or retract the paper in light of the DARPA proposal, which makes clear the large number of previously unreported SARS-related coronaviruses and the intention of a US-Chinese scientific team to introduce an FCS into such viruses?