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Origin of Covid 19: the laboratory leak is the most likely (part 3)

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Having described the complexity of the question of the origin of Sars-Cov2, the main players and their research (GOF, etc.), then the history of the pandemic (part 1[i] and part 2[ii]), we can give the opinions of the various parties, without any of them being totally convincing.



What are the arguments in favour of the zoonotic theory?

The Chinese Communist Party (CCP) is categorical, although it provides no scientific evidence and has had samples destroyed from the first contaminated individuals[iii], which weakens its argument.

From the outset, it has considered several theories.

The first is that the pandemic is a zoonosis that occurred at the Wuhan animal market. Admittedly, one article maintains that the epicentre of the contamination was the Wuhan animal market (and not the WIV)[iv]. But the destroyed samples make the story fragile and the collection biased. One article proves that two different lineages are possible ancestors of SARS-CoV2[v]. Other publications emphasise the very low diversity of infecting viruses, which would suggest a non-natural source. In any case, the best candidate (RATG13) is too distant to have evolved `naturally'. As a consequence what we have here is an evolutionary leap that cannot be explained by `*natural*' evolution.

The other theory put forward by the PCC is that the contamination came from frozen food imported from the United States, Europe, New Zealand, etc. However, the World Health Organisation (WHO) examined the imported batches and found '*rare and isolated*' traces. However, the World Health Organisation (WHO) examined the imported batches and found "*rare and isolated*" traces. So they were not necessarily from third countries (*i.e.* the United States), but perhaps the batches were contaminated afterwards. However, according to the Chinese state media, "*all available evidence suggests that the coronavirus [...] did not start in central China in Wuhan*"[vi].

A spokesman for the Chinese embassy in the United States, Liu Pengyu, dismissed the laboratory leak out of hand, claiming to be basing himself on the WHO report, whose "*conclusions should be respected*". But they are not conclusive! The spokesman continued: "*From the very beginning, China has had a scientific, professional, serious and responsible attitude to monitoring the origin of the virus*". He added that American politicians and journalists were distorting "*the facts and the truth*" and that the United States should "*stop using the epidemic for political manipulation*"[vii]. The CCP is victimising itself. In 2023, it also talks of "*the lowest mortality rate from COVID19 of any state*" and adds that "*China has created a miracle in human history*"[viii].

Absence of proof is not proof of absence

Like *The Lancet* and Daszak's article, the journals *Science* and *Nature* were very inclined not only to deny the laboratory leak, but also to associate this thesis with "*conspiracy*" or with the ideas of the US Republicans. What is more, they inferred support for the zoonotic thesis and for the scientists who felt they were victims of a "*conspiracy*" omerta. Thus, in June 2023, Science wrote an article subtitled "*Ben Hu denies that he was ill in late 2019 or that his work on coronaviruses led to COVID-19, and recently declassified documents give no substance to the allegations against him*"[ix]. Ben Hu calls the accusations "*fake news*". In fact, the declassified documents do not deny the accusations. Indeed, they give substance to them and point out that Ben Hu was working on GOFs applied to coronaviruses and that some of this work was funded by the US federal government[x].

Overview of some of the positions taken

On 26 March 2021, Dr Robert Redfield, former director of the US Centers for Disease Control, stated that he "*continues to believe that the most likely etiology of this disease in Wuhan is a laboratory leak*"[xi].

A WHO report concluded on 30 March 2021 that a laboratory leak was "*extremely unlikely*"[xii]. China welcomed this conclusion. However, in a second report on 9 June 2022, the WHO stated that "*key data have not yet been made available for a full understanding of how the COVID-19 pandemic began*". Furthermore, "*no new data have been made available to assess the laboratory*

as a route of dissemination in the human population"[xiii]. The WHO Director "*called for additional studies to be conducted*". On 27 June 2025, the WHO's Scientific Advisory Group on the Origins of New Pathogens (known as SAGO) issued a report on the same issue, which provided no further information. This group stated that "*most of the information needed to assess the hypothesis [of] an accident linked to a laboratory [...] has not been communicated to the WHO or to SAGO. The WHO has made several requests to the Chinese government [...]. Without information to fully assess the nature of the work on coronaviruses in the Wuhan laboratories, or information on the conditions under which this work was carried out, it is not possible for SAGO to assess whether the first human infection(s) may have been the result of a research-related event or a breach of laboratory biosafety. This cannot therefore be ruled out, or proven, until further information is provided* "[xiv].

In May 2021, A. Fauci, public health advisor to eight US presidents, testified before the US Senate that "*the NIH [National Institutes of Health] has never funded and does not fund gain-of-function research at the Wuhan Institute of Virology*"[xv]. This has been contradicted above and by many people.

FBI Director Christopher Wray stated on 28 February 2023 that his agency "*has believed for some time that the origin of the pandemic is most likely a laboratory incident in Wuhan*"[xvi].

On 8 March 2023, Matt Hancock, Secretary of State for Health in the Biden government, considered that the theory of a natural origin "*did not hold water*", but the government's central secretariat told him to tone down his remarks for fear of angering China[xvii].

The US Intelligence Community (ODNI) updated the opinions of the country's various agencies[xviii]. According to this report, dated June 2023, and therefore predating Trump's election, but subsequently made public, "*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*". The CIA and another unnamed agency "*remain unable to determine the precise origin of the COVID-19 pandemic as both theories are based on significant assumptions or face challenges with conflicting reporting*". It goes on to say that "*almost all agencies consider that SARS-Cov2 was not genetically engineered. Most consider that SARS-Cov2 was not laboratory-adapted. Some are unable to make a determination. All believe that it was not developed as a biological weapon*". This statement is partly contradictory, because a debate is underway in these institutions.

Identifying traces of genetic modification is difficult. Indeed, the thesis of a WIV student in 2017 "*proved that reverse genetics techniques* [...] *left no trace of genetic modification of SARS-like coronaviruses*"[xix]. This makes a proof of genetic modification perhaps impossible without other clues. Such clues could be provided by the virus genomes in the WIV database, to which the laboratory cut off access on 3 September 2019.

In June 2024, an EcoHealth Alliance (EHA) press release stated[xx] that with the WIV they were "*studying bat coronaviruses that have never been shown to be capable of infecting humans; in fact, the degree of difference between SARS-CoV-2 and the closest bat coronavirus studied [RATG13] is about the same as the difference between human and chimpanzee DNA. Therefore, by this definition, the EHA and its subrecipient, the Wuhan Institute of Virology, were not conducting gain-of-function research, which was confirmed by a letter from the NIH to the EHA dated July 7, 2016, after reviewing our proposed research.*" Let us take these claims back. We proved that WIV had tested that its modified viruses "*were capable of infecting humans*", since they were tested on human cells or humanised mice. The close proximity between RATG13 and SARS-CoV2 is true, but only proves that natural evolution cannot explain the switch from one to the other, without ruling out the possibility that evolution was directed (GOF). False arguments do not lead to the conclusion

that EHA and WIV "*were not conducting research on gain of function*". Finally, the letter from the NIH cited shows precisely that it is a gain of function, whereas EHA claims the opposite[xxi]. This is the Newspeak, or communication of industrial companies.

The report by the subcommittee of the US Parliament (4 December 2024), already mentioned above, concludes that SARS-CoV2 "probably emerged as a result of a laboratory or research-related accident"[xxii]. It gives five arguments in favour of a laboratory leak:

1. The virus has a biological characteristic (furin site) that does not exist in nature.
2. The data show that all cases of COVID-19 originate from a single introduction into humans. This is in contrast to previous pandemics where there were multiple introductions.
3. Wuhan is home to China's leading SARS research laboratory, which has a history of conducting gain-of-function research at inadequate biosafety levels.
4. Researchers at the Wuhan Institute of Virology (WIV) were sickened with a COVID-like virus in autumn 2019, a few months before COVID-19 was discovered on the food market.
5. By almost any scientific standard, if there were evidence of a natural origin, it would have surfaced more than five years ago.

The Biden administration decided that from 20 January 2025, under President Trump, Daszak would be barred from federal funding[xxiii]. Yet Daszak claims that "*the experiments at WIV are not GOFs because the coronaviruses in the bats involved had not infected humans*"[xxiv]. The semantic manipulation is crude. He therefore denies that the WIV made GOFs because the coronaviruses did not infect humans (because they did not leave the laboratory?). But it is not necessary for modified viruses to have "*infected humans*" to be the result of a GOF. It only has to be *able* to do it.

On 26 January 2025, the CIA "*believes that the most likely cause of this pandemic [...] is an incident related to the Wuhan laboratory. The CIA believes that the virus responsible for the COVID-19 pandemic is most likely to have originated in a laboratory*"[xxv]. John Ratcliff, Director of the CIA, pointed out that his report had been endorsed under President Biden, but revealed under President Trump, brushing aside any accusation of political intent. However, he had "*little confidence*" in his answer and both hypotheses remained possible.

On 12 February 2025, Gio Jiakun, spokesman for the Chinese Foreign Ministry, reaffirmed that the WIV "*has never engaged in gain-of-function studies of the coronavirus. It has never designed, manufactured or leaked COVID-19*"[xxvi]. Beijing maintains that "*SARS-Cov2 appeared naturally*". It is enough to recall that a 2015 article, signed in particular by Shi and Baric, states: "*we generated and characterized a chimeric virus expressing the spike of bat coronavirus SHC014 in a mouse-adapted SARS-CoV backbone*"[xxvii] to prove that this is false. Here, they call chimeric virus a GOF-modified virus. In February 2016, Daszak described the work in question: "*you create pseudo particles, you insert the spike proteins from those viruses, see if they bind to human cells. […] So you narrow down the field, you reduce the cost, and you end up with small number of viruses that really do it like killers.*"[xxviii].

On 12 March 2025, two German newspapers (*Die Zeit* and *Sueddeutscher Zeitung*) revealed that the German Intelligence Agency (BND) estimated an 80-90% probability that the coronavirus at the origin of the COVID-19 pandemic had been accidentally released by the WIV[xxix]. The BND was aware of numerous security flaws in the WIV laboratories (P3 and P4).

On 1 April, the French National Academy of Medicine issued an opinion[xxx] mentioning "*biosafety and bioprotection problems in the Wuhan laboratories*", but calling for the development of a "*culture of risk control in biosafety*" at global level and taking advantage of the opportunity to request more

funding. It therefore defends its work and the public funding of its members. It was the French government that supplied the plans and planned to build the P4 laboratory in Wuhan. China refused to allow French companies to be present, but kept the plans. The Académie also refers to "*the A/H5N1 avian flu virus modified by directed mutagenesis, which has been made contagious in humans by the respiratory route*". This is the example of Ron Fouchier[xxxi], who proves that only five mutations in an avian virus make it deadly and capable of spreading through the air between mammals. Similarly, in 2015, Shi and Baric proved that a virus that cannot enter human cells can do so by simply forcing two modifications (or four amino acids) into it. And it's precisely these two mutations that the MERS virus possesses[xxxii]. In its proposal for new regulations on GMO/NTG plants, the European Commission considers as "*equivalent to conventional breeding*" either an infinite number of base substitutions, or up to 20 modifications of 20 bases (*i.e.* 400 bases, possibly repeated)[xxxiii]. The pseudovirus manufactured by Shi and Baric would therefore, according to the position defended by the European Commission, be largely equivalent to nature and therefore risk-free. Yet MERS has killed humans. The NGT1 criterion devised by the European Commission therefore guarantees neither naturalness nor, above all, the absence of risk, at least as far as viruses are concerned.

The US government has made public[xxxiv] an analysis that includes some excellent arguments, even if its aim is also to harm the Chinese government. It also reveals that Biden signed a "*full and unconditional pardon for any offenses against the United States which he may have committed*" in favor of Fauci, former director of the National Institute of Allergy and Infectious Diseases (NIAID) and public health advisor to eight presidents. It appears that several Americans refused to testify or lied. In fact, these investigations have been a battle between scientists and elected Democrats against elected Republicans. This aspect of the issue cannot be overlooked, even if it raises serious questions about the `*independence*' of research and politics.

It cannot be ruled out that if the political authorities of any country (China, but also the United States, France, etc.) continue to tell only part of what they know, this will further undermine public confidence in our politicians, but also in our scientists. In particular, as long as GOF operations are carried out on Earth, citizens may feel at risk because of certain irresponsible scientists, who know that a virus can come out, even from a P4 laboratory, but who want to work to advance their careers and "*Science*" and because of the politicians who cover up for them. Should the GOF be regulated? If not, should they be tolerated? Should they not be banned across the board, from all laboratories, military or otherwise?

i Olivier Leduc, « Origin of Covid-19: laboratory leak is the most likely scenario part1 », *Inf'OGM*, September 10th 2025.

ii Olivier Leduc, « Origin of Covid-19: laboratory leak is the most likely scenario part2 », *Inf'OGM*, September 15th 2025.

iii T. O'Connor, « China Acknowledges Destroying Early Coronavirus Samples, Confirming U.S. Accusation », *Newsweek*, 15 May 2020.
The Chinese government admits that it destroyed virus samples (not yet isolated) because only P4 laboratories could store viruses. But only some samples were destroyed, not all. What's more, the destruction of samples did not continue afterwards. So the two parties are not talking about the same thing.

iv Michael Worobey *et al.*, « The Huanan Seafood Wholesale Market in Wuhan was the early epicenter of the COVID-19 pandemic », *Science*, Vol 377, Issue 6609, pp. 951-959, 26 July 2022.

v Jonathan E. Pekar *et al.*, « The molecular epidemiology of multiple zoonotic origins of SARS-CoV-2 », *Science,* Vol 377, Issue 6609, pp. 960-966, 26 July 2022.

vi S. Yan, « Beijing mega-market shut down as regime unleashes wave of Covid propaganda blaming West », *The Telegraph*, 26 November 2020.

vii K. Eban et J. Kao, « COVID-19 Origins: Investigating a "*Complex and Grave Situation*" Inside a Wuhan Lab », *Propublica*, 28 October 2022.

viii Press release of China, « China achieves major, decisive victory in COVID response: CPC leadership »,17 February 2023.

ix Jon Cohen, « '*Ridiculous*,' says Chinese scientist accused of being pandemic's patient zero », *Science insider*, 23 June 2023.

x Hu B *et al*., « Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus », *PloS Pathog*, 30 November 2017.

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xii WHO, « WHO-convened Global Study of Origins of SARS-CoV-2: China Part », 30 March 2021.
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xiii WHO, « Scientific Advisory Group for the Origins of Novel Pathogens (SAGO): preliminary report », 9 June 2022. Geneva: World Health Organization; 2022.

xiv WHO, « Independent assessment of the origins of SARS-CoV-2 », 27 June 2025.

xv « Dr. Fauci and CDC Director Walensky Testify on Efforts to Combat COVID-19 », *C-SPAN*, 11 May 2021.
S. Lerner, M. Hvistendahl and M. Hibbett, « NIH Documents Provide New Evidence U.S. Funded Gain-of-Function Research in Wuhan », *The Intercept*, 9 September 2021.

xvi A. Sabes, « FBI director says COVID pandemic '*most likely*' originated from Chinese lab », *Fox News*, 28 February 2023.

xvii I. Oakeshott, « Upsetting China is the Government's biggest taboo, as I found out the hard way », *The Telegraph*, 8 March 2023.

xviii Office of the Director of National Intelligence (ODNI), « Potential links between the Wuhan Institute of Virology and the origin of the COVID-19 pandemic », June 2023 (declassified later).

xix ODNI, « Updated Assessment on COVID-19 Origins »,29 October 2021.

xx Press Release « EcoHealth Alliance's Response to Recent Allegations », 3 June 2024.

xxi S. Lerner, M. Hvistendahl and M. Hibbett, « NIH Documents Provide New Evidence U.S. Funded Gain-of-Function Research in Wuhan », *The Intercept*, 9 September 2021.

xxiiSubcomitee of the US Parliament, « After Action Review of the COVID-19 Pandemic: The Lessons Learned and a Path Forward », 4 December 2024.

xxiii S. Knapton, « ‘*Corrupt*’ British zoologist sanctioned over Wuhan experiments that may have sparked Covid », *The Telegraph*, 20 January 2025.

xxiv Letter from P. Daszak quoted in S. Knapton, « No lab had virus close enough to Covid to spark pandemic, claims zoologist funding Wuhan research », *The Telegraph* 14 March 2023.

xxv E. Banco, « CIA says COVID-19 more likely to have come from lab than nature », *Reuters*, 25 January 2025

xxvi W. Echols, « China’s denial of coronavirus tinkering at Wuhan lab misleading », *VOA News*, 19 February 2025.

xxvii Menachery, V., Yount, B., Debbink, K. *et al.*, « A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence », *Nat Med* **21**, 1508–1513, 9 November 2015.

xxviii W. Echols, « China’s denial of coronavirus tinkering at Wuhan lab misleading », *VOA News*, 19 février 2025.

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