

Three international studies into the origins of coronavirus refute the fabricated Wuhan ‘lab leak’ claim

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“When you look at all the evidence together, it’s an extraordinary clear picture that the pandemic started at the Huanan market!” Dr. Michael Worobey, evolutionary biologist at the University of Arizona.

Over the weekend, three studies were released in pre-print form that offer additional compelling evidence that the SARS-CoV-2 virus, which causes COVID-19, spilled over from animals to humans, not once, but at least twice, in and around the Huanan Seafood Market in Wuhan, China, within a short period of time in November and December 2019.

The three studies—the first from the Chinese Centers for Disease Control and Prevention and paired reports conducted by a distinguished international panel of scientists, virologists, and experts in their field, offer further compelling evidence against the bankrupt, politically reactionary, and fabricated construct that the coronavirus was manufactured by Chinese scientists at the Wuhan Institute of Virology (WIV) and then intentionally or accidentally released into the community.

The paired studies were, in fact, rushed to pre-print by Dr. Michael Worobey, Dr. Kristian Andersen, and colleagues, shortly after the Chinese CDC posted their report online. This demonstrates that experts within China and outside it came to the same conclusions independently, each providing important corroboration for the other.

And for both the Chinese authority and the international collaboration of these principled scientists against the political squalor that has been unleashed, it is adherence to scientific principles and the congruity of their data that vindicates both. It is noteworthy that Dr. Worobey had been one of several scientists in May 2021 calling for more investigations into the origins of COVID, including the possibility that SARS-CoV-2 may have escaped from the Wuhan Institute of Virology.

The Chinese study is the first official public report on the hundreds of samples collected in and around Huanan market after it had been closed on January 1, 2020. Though none of the animal swabs covering 18 species picked up the coronavirus, 73 environmental samples tested positive by PCR with three successful live viruses isolated, which shared nucleotide identity with the early human isolates to within 99.98 to 99.993 percent.

The number of samples breaks down as follows: 923 environmental samples collected, with 73 found positive, for a rate of 7.9 percent. Of the 828 samples inside the Huanan market, 64 samples were positive. Five of 14 samples in adjacent warehouses that belonged to the market were positive. Among 51 sewage wells in the surrounding area, three tested positive. Lastly, only one out of 30 environmental samples from other markets in Wuhan tested positive.

Of the 64 positive samples found at the market, 87.5 percent (56 out of 64) were collected in the western zone of the market. The study further narrowed the largest cluster to one area of the market as depicted in figure one. Additionally, all four sewage wells in the market tested positive, which indicates that the people in the market contaminated the sewage as

opposed to the contaminated sewage being the source of the cluster.

The Chinese CDC also reported results of testing approximately 20 percent of the vendors (134/678). Of 21 Huanan market vendors who tested positive, 19 of them were in the west zone, only two in the east zone. This data provides considerable epidemiologic evidence for Huanan market being a catalyst for the outbreak of infections.

With respect to the paired studies, in discussion with Dr. Kristian G. Andersen, the Director of Infectious Disease Genomics at Scripps Research Translational Institute in La Jolla, California, who was one of the lead authors with Dr. Michael Worobey on the spatial-temporal analysis of infections surrounding the Huanan market, science reporter Amy Maxmen at *Nature*, wrote that:

Their analyses add weight to original suspicions that the pandemic began at the Huanan Seafood Wholesale Market, which many of the people who were infected earliest with SARS-CoV-2 had visited. The preprints contain genetic analyses of coronavirus samples collected from the market from people infected in December 2019 and January 2020, as well as geolocation analyses connecting these samples to a section of the market where live animals were sold.

Using maps provided by the WHO’s mission report on the origins of SARS-CoV-2, they set out to pin the exact location and date of known COVID-19 cases from Wuhan with onset of symptoms in December 2019. Using this simple approach, they were able to create an infection density map that placed Huanan at its epicenter. Even when cases without links to the market were plotted, Huanan market remained the most plausible site for the start of the community transmission.

Dr. Worobey wrote, “Striking contrast with cases from later in the epidemic, when the virus was more widespread in Wuhan. In early 2020, [Panel C and D, figure 2] you see cases all through central Wuhan, on both sides of the Yangtze. We found that cases in December were both nearer to, and more centered on, the Huanan market than could be expected given either the population density distribution of Wuhan, or the spatial distribution of COVID cases later in the epidemic. Its epicenter was at the market.” [Also note the distance of the WIV (red circle) from Huanan market]

As the authors of the study note, “Multiple lines of evidence establish the Huanan Market in Wuhan as the site where the COVID-19 pandemic originated in late 2019:

i. SARS-CoV-susceptible animals, including raccoon dogs, were sold at the market in November and December 2019

ii. Vendors known to have sold raccoon dogs in earlier years—and known to have sold illegal live mammals in late 2019—yielded a large number of SARS-CoV2 positive environmental samples, including several objects clearly associated with animals

iii. Positive environmental samples in the market were concentrated in the Southwest corner of the western section of the market, the same area where most live mammals were traded

iv. Most cases among vendors within the market occurred in the western section where live mammals were sold

v. A large proportion of the earliest known cases were identifiable as individuals who worked at, visited, or were linked to somebody who visited the market

vi. This epidemiological link to the Huanan market is genuine and not due to ascertainment bias caused by special focus on the market as a possible site of cases

vii. Lineage A – and not just lineage B (more on this later)—viruses were circulating near to and centered on the Huanan market in the early stages of the outbreak, suggesting multiple spillovers may have occurred at the market

viii. The spatial pattern of cases in December being so close to and centered on the Huanan market cannot be explained as arising by chance given population density patterns in Wuhan

ix. This pattern holds when considering only cases that had no history of exposure at Huanan market, demonstrating that community transmission began in the direct vicinity of the market

x. Only by January and February 2020 did the spatial pattern of cases reflect that of the population density patterns in Wuhan precluding an earlier period of general transmission

xi. [And finally] In a city of 11 million people there are thousands of sites that would be at least as likely to be the site of the initial cluster of a respiratory disease as the western section of the Huanan market, which measures only about 150 meters by 70 meters, if the pandemic had not involved the trade in live mammals

As the study notes, based on their epidemiological analyses, no other site in Wuhan was identified as even “plausibly” being linked to the December 2019 COVID cases, not even a nearby major transit hub, the Hankou Railway station, nor the Wuhan CDC which is close to the market. According to the World Health Organization, “no storage nor laboratory activities on coronaviruses or other bat viruses preceding the outbreak” were taking place at the site in December 2019 or preceding months. It should be added, neither was the Wuhan Institute of Virology implicated in these rigorous analyses as a possibility. Andersen noted, “This is extremely strong evidence.”

The understated form in which the conclusions are reported by the US scientists is striking. In no way do the authors trumpet that these are ironclad results against the lab leak theory. The presentation takes the form of a courtroom case where the defense provides extremely strong circumstantial evidence that their client was not at the scene of the crime and could not have committed the murder. The authors of the current studies know full well how politically dangerous the issue has become. In a courageous and principled way, providing rigorous proof, they present the evidence succinctly, in a straightforward and detached manner.

The second more complex study, also co-authored by Dr. Michael Worobey, the head of the Department of Ecology and Evolutionary Biology at the University of Arizona, finds that SARS-CoV-2 emerged as a result of at least two separate zoonotic events in November or December

in close proximity in time to each other.

During the original outbreak in Wuhan, there were two major lineages detected, denoted as A and B, with minor but detectable differences. Lineage B was more common, accounting for two-thirds of 700 complete genomic sequences in the early phase of the pandemic from December to February.

Worobey writes that Dr. Jonathan Pekar’s “simulations and molecular clock dating estimate put the earliest of the (at least) two successful introductions into humans in late November.” The report concluded, based on a genetic evaluation, the two lineages are too different from one another to have evolved one from the other in humans during such a short time. Because lineage B came to dominate, they assumed it spilled over first and outcompeted lineage A. Given two separate “jumps” from animals to humans, the overwhelming likelihood is that this took place in the “wet” market, where many similar animals were in close proximity to many people, and not in the Wuhan lab.

In the article in *Nature*, Maxmen writes, “Taking all the new data together, and adding a degree of speculation, Andersen [the author of *the proximal origin of SARS-Cov-2*] suggests that raccoon dogs could have been infected on a farm that then sold animals at the markets in Wuhan in November or December 2019, and the virus might have jumped to people handling them, or to buyers. At least twice, those infections could have spread from an index case to other people, he says.”

On May 28, 2021, the *World Socialist Web Site* International Editorial Board wrote about the bankrupt propaganda campaign launched by the Biden administration and US intelligence communities to resurrect the fabricated lie that COVID-19 originated in a Chinese laboratory.

The WWSW wrote, “This lie defies overwhelming scientific evidence and the findings of a World Health Organization (WHO) investigation released in late March. It will go down as one of the greatest falsehoods in human history—a colossal untruth that eclipses even the Bush administration’s perjured claims about Iraq’s ‘weapons of mass destruction.’ ... The promotion of the lab-origin theory is driven by political conditions and social interests.”

First, the “lab lie” campaign was used as a diversion for the failures of the US and other governments in implementing policies that have led to mass death. Second, it was used to incite nationalist hatred against China in support of the US’s aim that will prepare for economic and potentially military conflict with China.

The latest three studies function as an antidote against the ideological poison being pumped into American politics. Accordingly, attempts are already underway to dismiss these studies and attack their authors for purporting to find good faith efforts on the part of their Chinese counterparts. But science knows no nationality or borders. Workers must defend those scientists who stand on principle and advance the truth as critical allies in carrying forward the class struggle.



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