The Possibility that the COVID 19 Virus Had a Wuhan Laboratory Origin

Selected Resource Materials

Understanding the Risk of Bat Coronavirus Emergence

Peter Daszak

EcoHealth Alliance

This summary contains the information for the 2014 and 2017 NIH grants to the Ecohealth Alliiance that funded the Wuhan Institute for Virology research on bat conronaviruses. As the grant description shows, this research included gain of function/gain of threat research to make coronaviruses viruses more pathogenic using techniques including genetic engineering, cell culture, and animal experimentation.

https://grantome.com/grant/NIH/R01-AI110964-06

https://grantome.com/grant/NIH/R01-AI110964-04

<u>Discovery of a Rich Gene Pool of Bat SARS-Related Coronaviruses Provides New Insights into the Origin of SARS Coronavirus</u>

November 30, 2017

An example of the research done at the Wuhan Institute of Virology (WIV) under the NIH and USAID grants. The research article shows that in 2017 the WIV was placing whole bat coronaviruses into human cell cultures in a manner which would allow them to evolve and adapt and become possible pathogens to humans.

file:///C:/Users/AKimbrell/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/M37O4WG 0/PLOS%202017%20China%20Bat%20SARS%20CV%20ppat.1006698%20(002).pdf

<u>Did the SARS-CoV-2 Virus Arise from a Bat Corona Virus Research Program in a Chinese Laboratory? Very Possibly</u>

June 4, 2020

Milton Leitenberg,

Bulletin of the Atomic Scientists

A comprehensive review of the circumstantial evidence that the COVID 19 virus was accidentally released from a Wuhan high-security laboratory.

https://thebulletin.org/2020/06/did-the-sars-cov-2-virus-arise-from-a-bat-coronavirus-research-program-in-a-chinese-laboratory-very-possibly/

Lab-Made? SARS-CoV-2 Genealogy Through the Lens of Gain-of-Function Research,

April 22, 2020

Yuri Deigin

A valuable in depth review of the science behind the origins of the COVID virus that demonstrates how it could have been engineered in a Wuhan high-security laboratory. The author also notes how the COVID pandemic highlights the dangers of gain of function research.

https://medium.com/@yurideigin/lab-made-cov2-genealogy-through-the-lens-of-gain-of-function-research-f96dd7413748

The Case is Building That COVID-19 Had a Lab Origin

June 2, 2020,

Jonathan Latham and Allison Wilson

Independent Science News,

A well-researched paper exploring the plausibility of the COVIUD 19 Virus being and accidentally released from a Wuhan High-Security Laboratory, The paper also notes some of the powerful scientists and scientific organizations whose self-interest would be to deny this hypothesis.

https://www.independentsciencenews.org/health/the-case-is-building-that-covid-19-had-a-lab-origin/

The Non-Paranoid Guide to Viruses Escaping from Labs

May 14, 2020

Rowan Jacobsen

Rolling Stone

An important summary of laboratory accidents and how COVID 19 should increase the call for improved international biosecurity and regulation of gain of function/gain of threat research.

https://www.motherjones.com/politics/2020/05/the-non-paranoid-persons-guide-to-viruses-escaping-from-labs/

8 questions From a Disease Detective on the Pandemic's Origins:

<u>Dr. David R. Lucey wants answers to pointed questions that bear on how the coronavirus leapt from bats to humans.</u>

July 8, 2020

William Broad

New York Times

Lucy includes in his questions the possibility that the COVID 19 virus had a laboratory origin.

https://www.nytimes.com/2020/07/08//coronavirus-origin-china-lucey.html

In Silico Comparison of Spike Protein-ACE2 Binding Affinities across Species: Significance for the Possible Origin of the SARS-CoV-2 Virus

May 13, 2020

Sakshi Piplani et al,

,ArXiv:2005.06199 [q-Bio]

An important study finding that no virus matching COVID-19 has been found in nature despite an intensive search to find its origins. Without an animal carrier to point to, the theory that COVID 19 virus came from nature rather than a laboratory has no concrete circumstantial or scientific support at this time

https://arxiv.org/abs/2005.06199

China rules out Animal Market and Lab as Coronavirus origin

May 26, 2020,

James T. Areddy

Wall Street Journal,

The demise of the wet market theory of the origin COVID-19 virus means there is no credible non-laboratory origin scenario at this time.

https://www.wsj.com/articles/china-rules-out-animal-market-and-lab-as-coronavirus-origin-

State Department cables warned of safety issues at Wuhan lab studying bat corona viruses

April 14 2020

Josh Rogin

Washington Post

An important revelation first reported by Rogin that the US State Department had been warned of major safety deficiencies at the Wuhan Institute of Virology (WIV) especially in their gain of function/gain of threat work on making bat coronaviruses capable of infecting human cells.

https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/

WTH Really Happened at the Wuhan Lab? Josh Rogin on the origin of the Corona Virus

April 27, 2020

American Enterprise Institute

An extensive podcast during which Josh Rogin further describes the US State Department cables on safety issue at the WIV and his other investigative work on the origin of the COVID 19 virus.

https://www.aei.org/wp-content/uploads/2020/04/4.27.20-Josh-Rogin-transcript-PDF.pdf

Inside the Chinese Lab Poised to Study World's Most Dangerous Pathogens

February 22, 2017

David Cyranoski,

Nature Magazine

In this article some scientists express the concern about the biosecurity at the WIV.

https://www.nature.com/news/inside-the-chinese-lab-poised-to-study-world-s-most-dangerous-pathogens-1.21487

National Biosafety Systems: Case Studies to analyze current biosafety approaches and Regulations for Brazil, China, India, Israel, Pakistan, Kenya, Russia Singapore, the United Kingdom and the United States.

July 2016

UPMC Center for Health Security,

This study funded by the US government notes that China has a shortage of officials, experts and scientists who specialize in laboratory biosafety and does not appear to have a comprehensive training program for highly pathogenic agents.

https://www.centerforhealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/National%20Biosafety%20Systems.pd

SARS Escaped Beijing Lab Twice: Laboratory Safety at the Chinese Institute of Virology Under Close Scrutiny

April 25, 2004

Robert Walgate

The Scientist

A report on the escape of the first SARS virus from high scurty Chinese laboratories.

https://www.the-scientist.com/news-analysis/sars-escaped-beijing-lab-twice-50137

Almost 100 lab workers in China Infected with Potentially Deadly Pathogen

December 17, 2019

Rosie McCall

Newsweek

A report on a recent laboratory leak at a Chinese Laboratory

https://www.newsweek.com/almost-100-lab-workers-china-infected-potentially-deadly-pathogen-1477652