



Scientists Find Covid-19 Contains DNA Code Patented By Moderna YEARS Before Pandemic Began

Description

USA: Further evidence that we have not been told the truth about the origins of Covid-19 have emerged after scientists found genetic material patented by Moderna in 2016 in the virus's spike protein. According to researchers, there is a one-in-three-trillion chance of this "coincidence" evolving naturally.

Fresh suspicion that Covid may have been tinkered with in a lab emerged today after scientists found genetic material owned by Moderna in the virus's spike protein.

The team of international researchers identified a tiny snippet of code that is **identical** to part of a gene patented by Moderna **three years before the pandemic**.

The Moderna-patented genetic code was discovered in SARS-CoV-2's unique furin cleavage site, the part that makes it so effective at infecting people and separates it from other coronaviruses.

Moderna filed the patent for the genetic code in February 2016, years before Covid-19 was discovered, as part of its cancer research division, records show.

The structure of the spike protein has been one of the focal points of debate about the virus's origin, with some scientists claiming it **could not have been acquired naturally**.



(12) United States Patent Bancel et al.	(10) Patent No.: US 9,587,003 B2 (45) Date of Patent: Mar. 7, 2017
(54) MODIFIED POLYNUCLEOTIDES FOR THE PRODUCTION OF ONCOLOGY-RELATED PROTEINS AND PEPTIDES	61/618,873, filed on Apr. 2, 2012, provisional application No. 61/681,650, filed on Aug. 10, 2012, provisional application No. 61/737,147, filed on Dec. 14, 2012, provisional application No. 61/618,878, filed on Apr. 2, 2012, provisional application No. 61/681,654, filed on Aug. 10, 2012, provisional application No. 61/737,152, filed on Dec. 14, 2012, provisional application No. 61/618,885, filed on Apr. 2, 2012, provisional application No. 61/681,658, filed on Aug. 10, 2012, provisional application No. 61/737,155, filed on Dec. 14, 2012, provisional application No. 61/618,896, filed on Apr. 2, 2012, provisional application No. 61/668,157, filed on Jul. 5, 2012, provisional application No. 61/681,661, filed on Aug. 10, 2012, provisional application No. 61/737,160, filed on Dec. 14, 2012, provisional application No. 61/618,911, filed on Apr. 2, 2012, provisional application No. 61/681,667, filed on Aug. 10, 2012, provisional application No. 61/737,168, filed on Dec. 14, 2012, provisional application No. 61/618,922, filed on Apr. 2, 2012, provisional application No. 61/681,675, filed on Aug. 10, 2012, provisional application No. 61/737,174, filed on Dec. 14, 2012, provisional application No. 61/618,935, filed on Apr. 2, 2012, provisional application No. 61/681,687, filed on Aug. 10, 2012, provisional (Continued)
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(73) Assignee: ModernaTX, Inc. , Cambridge, MA (US)	(58) Field of Classification Search None See application file for complete search history.
(*) Notice. Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.	(56) References Cited
(21) Appl. No.: 15/015,684	U.S. PATENT DOCUMENTS
(22) Filed: Feb. 4, 2016	2,008,526 A 7/1935 Wrappier et al. 3,552,394 A 1/1971 Horn et al. (Continued)
(65) Prior Publication Data	FOREIGN PATENT DOCUMENTS
US 2016/0152678 A1 Jun. 2, 2016	CA 2376634 A1 12/2000 CA 2473135 C 6/2003 (Continued)
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(63) Continuation of application No. 14/106,988, filed on Dec. 16, 2013, now Pat. No. 9,301,993, which is a continuation of application No. PCT/US2013/030070, filed on Mar. 9, 2013.	US 2002/0198163 A1 12/2002, Felgner et al. (withdrawn) (Continued)
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DailyMail [report](#): The international team of researchers suggest the virus may have mutated to have a furin cleavage site during experiments on human cells in a lab.

But there is some debate about whether the match is as rare as the study claims, with other experts describing it as a 'quirky' coincidence rather than a 'smoking gun'.

In the latest study, published in [Frontiers in Virology](#), researchers compared Covid's makeup to millions of sequenced proteins on an online database.

The virus is made up of 30,000 letters of genetic code that carry the information it needs to spread, known as nucleotides.

It is the only coronavirus of its type to carry 12 unique letters that allow its spike protein to be activated by a common enzyme called furin, allowing it to spread between human cells with ease.

Analysis of the original Covid genome found the virus shares a sequence of 19 specific letters with a

genetic section owned by Moderna, which has a total of 3,300 nucleotides.

The US-based pharmaceutical firm filed the patent in February 2016 as part of its cancer research division, records show.

The patented sequence is part of a gene called MSH3 that is known to affect how damaged cells repair themselves in the body.

Scientists have highlighted this pathway as a potential target for new cancer treatments.

Twelve of the shared letters make up the structure of Covid's furin cleavage site, with the rest being a match with nucleotides on a nearby part of the genome.

Writing in the paper, led by Dr Balamurali Ambati, from the University of Oregon, the researchers said the matching code may have originally been introduced to the Covid genome through infected human cells expressing the MSH3 gene.

Professor Lawrence Young, a virologist at Warwick University, admitted the latest finding was interesting but claimed it was not significant enough to suggest lab manipulation.

He told MailOnline: 'We're talking about a very, very, very small piece made up of 19 nucleotides.

'So it doesn't mean very much to be frank, if you do these types of searches you can always find matches.

'Sometimes these things happen fortuitously, sometimes it's the result of convergent evolution (when organisms evolve independently to have similar traits to adapt to their environment).

'It's a quirky observation but I wouldn't call it a smoking gun because it's too small.

He added: 'It doesn't get us any further with the debate about whether Covid was engineered.'

Dr Simon Clarke, a microbiologist at Reading University, questioned whether the find was as rare as the study claims.

He told MailOnline: 'There can only be a certain number of [genetic combinations within] furin cleavage sites.

'They function like a lock and key in the cell, and the two only fit together in a limited number of combinations.

'So it's an interesting coincidence but this is surely entirely coincidental.'

MailOnline has approached Moderna for comment.

Circumstantial evidence has long raised questions about the origin of Covid and its link to the Wuhan Institute of Virology.

The facility was known to be conducting experiments on bat coronavirus strains similar to the one responsible for the pandemic.

China insisted early and often that the virus did not leak from the lab, claiming that crossover to humans must have occurred at a 'wet market' in Wuhan that sold live animals.

Perhaps driven by animosity for then-US President Donald Trump, who embraced the lab leak theory early on, mainstream media and academics in the West heaped scorn on the possibility, calling it an unhinged conspiracy theory.

But leaked emails showed that top scientists advising the UK and US Governments expressed concerns about the official narrative privately.

by Baxter Dmitry

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