

## Twitter Thread by [Billy Bostickson ■■■&■ ■](#)

[Billy Bostickson ■■■&■ ■](#)

[@BillyBostickson](#)



### 1. The mysterious case of Eddie Holmes and the SARS-COV-2 genome sequence publication delay

<https://t.co/ahWcudTbx>

Seems that Eddie was playing the "innocent card"

[@TheSeeker268](#) [@franciscodeasis](#) [@ydeigin](#) [@AntGDuarte](#) [@edwardcholmes](#)  
[@K\\_G\\_Andersen](#)

Edward Holmes on being asked why they didn't release the SARS-CoV-2 genome when they got it: "...essentially there were instructions that there's no publicizing the outbreak, so we kept it to ourselves, we told the key people in China..but we were told not to release the data..." [pic.twitter.com/mAGUUrset](https://pic.twitter.com/mAGUUrset)

— The Seeker (@TheSeeker268) [April 9, 2021](#)

2. Was the motive of <https://t.co/nu7hNVhiwP>'s rush release due to competition to get the first releaser credit for the sars-cov-2 genome?

3. [@GISAID](#) claims 'the access credentials of some of the persons listed as authors of Wuhan-hu-1 were among the access credentials used on January 10, 2020 to access the first genomes available on GISAID'

4. [@GISAID](#) formally wrote to the authors who acknowledged [Virological.org](#)'s post as the world's first release of the SARS-COV-2 genome, and penalised the authors of MN908947

5. but [@GISAID](#) didn't identify who exactly from Fudan University or University of Sydney ACCESSED and KNEW about IVDC's 'initial' submission of IVDC-01/05 on GISAID on 10th Jan, 2020, via login records of their GISAID account credentials.

6. A complex topic and timeline explained here:

<https://t.co/i6Z3Fnmb2Y>

#MN908947 #2019\_nCov #GISAID #CHINACDC

GISAID Submission date dispute\U0001f447<https://t.co/yx666wb6dO>

Yong-Zhen Zhang's Genbank submission dispute\U0001f447<https://t.co/W2pD1wNyHv>

— Coroldo1 (@coroldo1) March 2, 2021

7. and here:

GISAID Submission date

<https://t.co/UuflyHSpxZ>

#CNIC #SARSCOV2 #GISAID #CHINACDC #ISL402119 #ISL402120 #ISL402121

Thread for evidence only,timestamp according to GMT+8, the timezone of China, where first 4 SARS-COV-2 genomes released to the world. Any further analysis subject to individual's discretion. So, Let's roll

— Coroldo1 (@coroldo1) February 26, 2021

8. Professor Yong-Zhen Zhang's Genbank submission

This thread is #Genbank records regarding #MN908947. Evidence only, any further analysis upon this record subjects to individuals' own discretion.

<https://t.co/rJtxBrgyw2>

This thread is #Genbank records regarding #MN908947. Evidence only, any further analysis upon this record subjects to individuals' own discretion. So, let's roll.

— Coroldo1 (@coroldo1) February 21, 2021

9. In the presentation, was Edward Holmes referring to the 3rd January gag order?

Similar to the one communicated to WIV by China CDC via a phone call on January 1st? and China NHC?

**Yan-Yi Wang**

*TO: Public Technology Service Center, Department of Administration, Department of Scientific Research, Others, Editorial Department of Virologica Sinica*

## **Important Notice on Prohibiting Disclosure of Information on Unknown Pneumonia**

(January 2, 2020, Thursday, 10.28)

Dear all,

Due to the recent public attention on “unknown pneumonia in Wuhan”, the spread of some improper, untrue words earlier on has sparked panic.

Our institute is carrying on relative work in response under the supervision of public health authority. I now announce the following as was conveyed by National Health Commission through a phone call yesterday:

**All the testings, data, results and conclusions regarding this epidemic are not allowed to be published on personal media platforms or social media. Nor are they allowed to be disclosed to any media (including official media), partner institutions (including technical and service companies) and so on.**

Please abide by the rules !

Best

Yan-Yi Wang

10. Professor Holmes mentioned the gag order to paint Professor Zhang Yongzhen as a rebellious hero.  
"But China CDC was in fact the force pushing that gag order, to intimidate hospitals, universities & Labs"  
<https://t.co/gADnGw5LW7>



#### 11. ICDC vs IVDC

"For outsiders, yes, but inside the Chinese CDC, the gag order was a protection for their dominance, the only conflict here

was the twisted power play between ICDC and IVDC"

### Institutes:

**China CDC:** China National Center for Disease Control and Prevention

**IVDC:** Institute of Viral Diseases Control and Prevention, China CDC

**CNIC:** China National Influenza Center, IVDC, China CDC

**ICDC:** National Institute for Communicable Disease Control and Prevention, China CDC

**SHPCC:** Shanghai Public Health Clinical Center, Fudan University, Shanghai, China

**UoS:** University of Sydney, Australia

**A\*Star:** Singapore's Agency for Science, Technology and Research

**BII:** Bioinformatics Institute, Singapore

**GenBank:** NIH genetic sequence database

**GISAID initiative:** Global Initiative on Sharing All Influenza Data (database), incorporated in Germany

**GIS:** Genome Institute of Singapore

### Who's Who:

**Peter Bogner:** President of GISAID

**Sebastian Maurer-Stroh:** Executive director of BII, Former deputy director of the influenza division, CDC; SAC (Scientific Advisory Council) member of GISAID

**George Gao Fu:** Director of China CDC, SAC member of GISAID

**Wang Dayan:** Head of CNIC

**Shu Yuelong:** Former Head of CNIC, SAC member of GISAID

**Zhao Xiang:** Member of CNIC

**Zhang Yong-Zhen:** Professor, (former) ICDC & SHPCC

**Edward C. Holmes:** Professor, UoS

**Andrew Rambaut:** Owner of Virological.org website, University of Edinburgh, SAC member of GISAID

**Curators:** experts in different time zones working 24/7 GISTo check and add genomes for submissions to GISAID

**Lan Yu:** Member of CNIC, Database Technical Group member of GISAID

**Trevor Bedford:** Nextstrain, Database Technical Group member of GISAID

### Definition of Time:

Due to the self rotation of our planet Earth, the world is divided into different time zones by human. People often use abbreviations such as UTC, GMT, PST, EST etc as remarks.

### Definition of 'Public Release'

12. Edward Holmes refers to the "key member"

Did he mean Xu Jianguo?

Xu Jianguo was Professor Yong-zhen Zhang's direct boss at ICDC, China, and the leader of the joint task force for pathogen identification in Wuhan.

13. Xu Jianguo organised the blind test kit trial which led to authorisation of the three basically useless early test kits, which gave false negatives and contributed to the death of many Wuhan citizens.

<https://t.co/4Xg99y4wRM>

A new thread with documented evidence to support all allegations about China CDC and their testing kits scam <https://t.co/6hFZPkObd0@colorado1> <https://t.co/zNorS2d8aF>

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) March 5, 2021

14. Unmasking a hero

<https://t.co/aZ5pMIFjef>

Unmasking a "Hero" <https://t.co/GvoFWUvp5T>

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

15. Guess what? Money over dead bodies!

<https://t.co/XeDJqg7V9S>

31. Guess What, the Test Kits were Crap too! [pic.twitter.com/buMEigSoAR](https://pic.twitter.com/buMEigSoAR)

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

16. The Genome Publication Delay

The Chinese government finally made its genomes public on Jan. 12, a day after another team published one without authorization. That opened the door for more companies to make their own test kits.

<https://t.co/jl5zeVhKHi>

34. Part 2: The Genome Publication Delay

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— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

17. Releasing the Genome

1. Yong-Zhen Zhang's team submitted the genome to Genbank on 05/01/2020, setting an embargo date for July 2020
2. They had no intention to release it immediately as the purpose was to get an accession number for Nature submission!

<https://t.co/x6FIQhrw5r>

41. Releasing the Genome

1. Yong-Zhen Zhang's team submitted the genome to Genbank on 5th Jan 2020, setting an embargo date for July 2020
2. They had no intention to release it in the first place as their only purpose was to get an accession number for Nature submission.

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

18. Our "hero" and Eddie's friend, Professor Yong-Zhen Zhang released the genome only AFTER he finished negotiating a secret validation which secured exclusive rights for three Shanghai testing kit companies.

<https://t.co/7XccNPnNc2>

42. Yong-Zhen Zhang released the the genome only AFTER he finished negotiating a secret validation which secured exclusive rights for three Shanghai testing kit companies.

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

19. Coincidences and Corruption

It turns out that all the CCDC affiliated researchers listed as authors on the first SARS-COV-2 genomes submitted to [@GISAID](#) on the 12th January, had interests in companies able to profit from the pandemic.

#### 43. What a Coincidence!

It turns out that every CCDC author listed as authors of the first SARS-COV-2 genomes submitted to GISAID ON 12th January, has a company to profit from the pandemic.

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) February 9, 2021

#### 20. Some useful documents about the SARS-COV-2 genome initial release dates to review

For one definition, means certain scientists who with means to access certain database can be regarded as 'public release'; while others argue that unlimited access to whoever have internet connection can be regarded as 'public release'

##### Definition of GISAID Certificates

Record file generated by GISAID after a successful submission, including date and authors etc al. Can be treated as 'proof' of submission time.

##### Definition of Fully Sequenced Virus Genomes

1. The initial version of MN908947.1 on Genbank, especially the fasta file on virological.org post, not only without metadata information, but also with poor quality and had a portion of human DNA added to the viral sequence, exceed 30k. The Genbank MN908947.1 was revised to MN908947.3 on 18<sup>th</sup> Jan 2020 for accuracy and replaced two authors.
2. The Five viral genomes on GISAID, 3 from China CDC, 2 from other two Chinese institutes, had good coverage, metadata information, and all confirmed by viral isolation independently. Though, some also needed updates for multiple Ns.

##### What Else You Need to Know:

1. Before February 2020 EpiCov Tab appeared in GISAID, the curating of initial SARS-COV-2 genomes was done manually. AFTER adapting the flu software (EpiFlu) to the coronavirus, GISAID can rapidly check the genomes for errors & generate reports by software.
2. Before applied the EpiCov, GISAID mainly use a blank flu data sheet for metadata.
3. Besides English version, GISAID also provides a Chinese version.
4. Using data from GISAID, you should agree the terms of GISAID, especially acknowledge the contribution and work of original submitters.
5. Submission via Genbank, you can choose to release immediately or set an embargo date to keep it from public release before the genome appeared in print.
6. Genbank database open to all and won't record the identity of the viewers.
7. You will need registration prior to login GISAID, and use the login credential to login and review the data on GISAID, and your reviewing record will be documented by the system.
8. You can submit to both Genbank and GISAID.
9. Submission of a genome mainly requires two key elements: genome files & metadata sheet/information

##### Significance of First SARS-COV-2 Genome(s) Public Release

1. The public release of first SARS-COV-2 genome(s) signaled the **KICK-OUT** of global fight against SARS-COV-2 **OUTSIDE** China, triggered the development of detection assays, novel vaccines, and most importantly, immediately helped the confirmation of international spread of covid-19.
2. It is a disservice to science –and disheartening – that, inaccurate and conflicting statements regarding when and where the first SARS-COV-2 genome(s) was/were made available

#### 21. Negotiations?

Both the <https://t.co/nu7hNVhiwP> release and the GISAID release were preceded by negotiations.

1. In the <https://t.co/B7Ei77AvSR> release, Eddie Holmes negotiated with Professor Zhang Yongzhen
2. In the GISAID case, GISAID negotiated with China CDC.

22. This is not the plausible methodology for emerging outbreaks as this pandemic proved to us time is of the essence during the early response.

Negotiations allow backdoor agendas and quid-pro-quo and covering of tracks, right, Eddie?

The first step in making test kits is to get samples of the virus and decode its genetic sequence. This leads to test designs, essentially a recipe for the tests.

The CDC had found the genetic map, or genome, of the virus by Jan. 3. By the next day, under CDC official Tan, the Emergency Technology Center at its Institute for Viral Disease Control had come up with test designs.

But this time, the government held back information about the genome and test designs. Instead, the China CDC finalized “technology transfer” agreements to give the test designs to the three Shanghai companies, according to four people familiar with the matter. The selection process was kept secret.

The CDC did not have the authority to altogether prevent other scientists with competing agencies and companies from getting samples through back door routes and coming up with their own test recipes. But it tried to stymie such efforts and stop testing from being carried out.

23. Did @edwardcholmes the "virus spotter" not spot this when he worked so closely with these CCDC researchers?

His excuse: China Politics?

You're twistin' my melon man!

<https://t.co/MM1sVbybc8>

For example, Dr. Shi Zhengli, obtained patient samples on her own, found the genome from them and came up with a test by Jan. 3, but her lab fell under the jurisdiction of a competing agency to the CDC, the Chinese Ministry of Science and Technology. The CDC barred her from obtaining more samples and testing for cases.

Provincial CDC staff were told that instead of testing and reporting cases themselves, they had to send patient samples to designated labs in Beijing for full sequencing, a complicated and time-consuming procedure. Otherwise, the cases would not be counted in the national coronavirus tally.

“It was absolutely abnormal,” said a CDC lab technician, who declined to be identified out of fear of retribution. “They were totally trying to make it harder for us to report any confirmed cases.”

In secret evaluations of test kits on Jan. 10, the CDC also approved only those from the three Shanghai companies, according to internal plans and instructions obtained by the AP.

22. China CDC Killed its Citizens for Profit [pic.twitter.com/RRrGlzFt3z](https://pic.twitter.com/RRrGlzFt3z)

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) February 9, 2021

24. In other news...

GISAID later went on a narrative manipulation campaign using its strong position to help IVDC to 'reclaim' the first 'public release' trophy.

So they forward logged the GISAID actual public release time!

25. As for the talk about possible funding loss for poor "rectified" Professor Zhang, how much more funding can this 'first release' generate in the future?

He had a top PR company help his image in 2020, so we no need to worry too much about his funding..

<https://t.co/2BYQmzSkvC>

36. The Professor's Propaganda Campaign

"Zhang team\u2019s unprecedented speed was made possible by the extraordinary disease-monitoring network they had built to detect emerging flu strains and coronaviruses"<https://t.co/Tnqf8sjX59>

— Billy Bostickson \U0001f3f4\U0001f441&\U0001f441 \U0001f193 (@BillyBostickson) [February 9, 2021](#)

26. Eddie and Zhang go back a long long way

Eddie needs to reveal what he knows about certain aspects of all this, or we will do it for him.

Leading Edge  
**Commentary**

Cell

## A Genomic Perspective on the Origin and Emergence of SARS-CoV-2

Yong-Zhen Zhang<sup>1</sup> and Edward C. Holmes<sup>1,2,\*</sup>

<sup>1</sup>Shanghai Public Health Clinical Center and School of Life Science, Fudan University, Shanghai, China

<sup>2</sup>Marie Bashir Institute for Infectious Diseases and Biosecurity, School of Life and Environmental Sciences and School of Medical Sciences, The University of Sydney, Sydney, Australia

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<https://doi.org/10.1016/j.cell.2020.03.035>


The ongoing pandemic of a new human coronavirus, SARS-CoV-2, has generated enormous global concern. We and others in China were involved in the initial genome sequencing of the virus. Herein, we describe what genomic data reveal about the emergence SARS-CoV-2 and discuss the gaps in our understanding of its origins.

**A New Human Coronavirus**

An important early association was toms ([Wu et al., 2020](#)). This patient was

27. Seven years of collaboration

# Extensive diversity of Rickettsiales bacteria in two species of ticks from China and the evolution of the Rickettsiales

[Yan-Jun Kang](#), [Xiu-Nian Diao](#), [Gao-Yu Zhao](#), [Ming-Hui Chen](#), [Yanwen Xiong](#), [Mang Shi](#), [Wei-Ming Fu](#), [Yu-Jiang Guo](#), [Bao Pan](#), [Xiao-Ping Chen](#), [Edward C Holmes](#), [Joseph J Gillespie](#), [Stephen J Dumler](#) & [Yong-Zhen Zhang](#) 

*BMC Evolutionary Biology* **14**, Article number: 167 (2014) | [Cite this article](#)

**21k** Accesses | **57** Citations | **1** Altmetric | [Metrics](#)

## 28. The Fairy Tale

25 days that changed the world:

How COVID-19 slipped China's grasp

<https://t.co/Mv8jlaJ5hy>

More than 500 miles to the east, Zhang, a leading virologist at the Shanghai Public Health Clinical Center, was very worried.

Like several other Chinese labs, Zhang and his team had cracked the virus' genetic code and concluded that it could be contagious. Unlike the other labs, he felt a duty to publish the information to help researchers work on tests, treatments and vaccines.

After Zhang's team finished sequencing the virus Jan. 5, his center internally warned leaders in Shanghai and health officials in Beijing, recommending protective steps in public spaces.

He also prepared to release the data, a step that took on added urgency after he visited Wuhan to speak at a university Jan. 9. That same day, the government confirmed the new disease was a coronavirus, but officials continued to play down the potential danger.

## 29. Prof Zhang and Prof Holmes examine a rat in a trap during an infectious disease research trip to China in 2013

<https://t.co/B3bK4ukW1b>

Eddie Holmes had the genetic blueprint for the coronavirus in his possession for exactly 52 minutes before he put it online.



30. Prof Holmes (right) visited Wuhan Central Hospital with Prof Zhang and researchers from the Wuhan Centre for Disease Control in 2016

<https://t.co/B3bK4ukW1b>



31. Just "Some Pressure"?  
as in Useless Test Kit Negotiation Pressure?

<https://t.co/W4heDvy24m>

Holmes found himself the one revealing the genetic code to the world because of broader freedoms in the West, he says.

“I encouraged him to release it, but they’re under some pressure in China not to release because the ministry of health wants to control the information. Eventually, on the Saturday morning, he sent me the sequence and I felt a huge burden of pressure to release this because, over the week, the number of cases had been building up and there was more global interest.”

### 32. An expensive PR campaign

ST Asians of the Year

Top scientist's decision to publish genome map made at some personal risk?

<https://t.co/f6vJyiW6oG>

NSW virologist sets a global example of the role of good science?

<https://t.co/CtBaoHdzFe>

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## THE STRAITS TIMES

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Professor Zhang Yongzhen broke ground when he published the first complete genome of Sars-CoV-2 in January, which allowed health authorities around the world to recognise the mysterious pathogen that would soon begin to cause mayhem beyond China's shores.

It was a choice he made at some personal risk, considering the political sensitivity of information surrounding [the coronavirus](#) at the time.

Prof Zhang, 55, who is at the Shanghai Public Health Clinical Centre, has been lauded for his bravery and professionalism by the international media, and was included as one of Time's 100 most influential people of this year.