

# Various Discoveries of SARS-CoV-2 Depict Different Picture of Its Origin

Yunlong Xia

The novel coronavirus (NCV), SARS-CoV-2 causing COVID-19 pandemic was first discovered in Wuhan, China on Dec. 8, 2019. The disease was fast isolated and identified by Chinese scientists and informed WHO on Dec. 31, 2019. China shared the genetic sequence of NCV on January 12, 2020, which was of great importance for other countries to use in developing specific diagnostic kits. WHO declared a Public Health Emergency of International Concern in January 2020, and a pandemic in March 2020. As of 19 October 2020, 40.2 million cases have been reported across 189 countries and territories. It has killed 1.1 million people and more than 27.6 million have recovered. , but the WHO estimates that around 800 million people in total may have been infected.

Science Magazine reported on last July 24 that researchers from Wuhan Institute of Virology and Huazhong Agricultural University didn't find NCV in samples from farmed animals and livestock taken around Wuhan and in other places in Hubei province. Many years of surveillance in Hubei have never turned up bat coronaviruses close to SARS-CoV-2, which suggested that the jump from animals to humans happened elsewhere .

Because pandemic can happen anywhere in the world, we need to investigate its origin and evolution scientifically. Though the NCV was first discovery in Wuhan, there were several afterwards evidences indicated that it was existed at other places earlier than Wuhan.

## 1. Spain detected NCV in the wastewater samples of March 12, 2019

Reuters reported on June 27 that Spanish virologists have found traces of the NCV in a sample of Barcelona waste water collected in March 2019, nine months before the

COVID-19 disease was identified in China. The online journal Medrxiv.org published this study and it summarized that "SARS-CoV-2 was detected in Barcelona sewage long before the declaration of the first COVID-19 case, indicating that the infection was present in the population before the first imported case was reported. Sentinel surveillance of SARS-CoV-2 in wastewater would enable adoption of immediate measures in the event of future COVID-19 waves" .

## 2. Japan tested its August, 2019 blood samples NCV positive

Japan's Ministry of Health, Labour and Welfare released a report on May 15, 2020 that in order to evaluate the performance of the NCV test kits, the ministry tested 500 blood donation samples collected from January to March in 2019 in Japan's Kōshin'etsu region. Two out of the five hundreds firms showed positive results, indicating that two people were found to be infected by NCV .

## 3. France back traced its "Patient Zero" to Nov. 16, 2019

Researchers in the city of Colmar in northeastern France recently announced that they identified two X-rays from November 16 and November 18, 2019, that show symptoms they say are consistent with the NCV. If the November cases are confirmed, it would mean the virus was spreading in Europe a full two months before France declared it had Covid-19 cases and even before Wuhan, China confirmed the outbreak .

## 4. Brazil found NCV in its November 2019 sewage samples

Medrxiv.org published an article titled SARS-CoV-2 in human sewage in Santa Catalina, Brazil, November 2019. The authors analysed human sewage located in Florianopolis (Santa Catalina, Brazil) from late Oc-

tober until the Brazil lockdown on early March. They detected SARS-CoV-2 in two samples collected independently on 27th November 2019 (5.49 ± 0.02 log genome copies/L). Subsequent samplings were positive until 4th March 2020 (coinciding with the first COVID-19 case reported in Santa Catalina), with a SARS-CoV-2 RNA increase of one log (6.68 ± 0.02 log genome copies/L). These results show that SARS-CoV-2 has been circulating in Brazil since late November 2019, earlier than the first reported case in Wuhan .

## 5. Italy also detected NCV in sewage sample of December 18, 2019

Italian researchers examined 40 waste water samples from October 2019 to February 2020 and discovered genetic traces of SARS-CoV-2 in samples of waste water collected in Milan and Turin on December 18, 2019 and in Bologna on January 29, 2020, the ISS institute said in a statement seen by AFP on Friday. The results were confirmed in two different laboratories by two different methods, showed the presence of SARS-CoV-2 in samples taken in Milan and Turin. The NCV was present in two large Italian cities in December, more than two months before the first case was detected. That suggests the virus appeared in Italy around the same time it was first reported in China .

## 6. Belleville Mayor declared his NCV infection to be in mid November, 2019

Mayor of Belleville, New Jersey, Michael Melham was tested positive for NCV antibodies on April 29, 2020. But he believes that he was sick with the virus in November 2019, more than a month before doctors in China first reported cases of NCV. Melham said he was sick toward the end of November and suffered from chills, hallucinations and

a "skyrocketing temperature" after he left the League of Municipalities Conference in Atlantic City which was held November 19-21, 2019. "It felt as if I was an addict going through withdrawal," Melham said in a press release. "I didn't know what was happening to me. I never felt that I could be so sick."

## 7. CDC director admitted some NCV deaths have been found posthumously

CNN reported on March 11, 2020 that during the House Oversight Committee discussion on the NCV response, the CDC director, Dr. Robert Redfield said that some deaths from NCV have been discovered posthumously. Rep. Harley Rouda asked Redfield if it's possible that some flu patients may have been misdiagnosed and actually had coronavirus. "The standard practice is the first thing you do is test for influenza, so if they had influenza they would be positive," Redfield said.

Rouda then asked Redfield if they are doing posthumous testing. Redfield said there has been "a surveillance system of deaths from pneumonia, that the CDC has; it's not in every city, every state, every hospital."

Rouda followed up and asked, "So we could have some people in the United States dying for what appears to be influenza when in fact it could be the coronavirus?" Redfield replied that "some cases have actually been diagnosed that way in the United States today." This hearing was also video recorded .

## 8. UCLA unveils that COVID-19 was spreading silently in Los Angeles last December

UCLA published a study that COVID-19 was spreading silently in Los Angeles last December. Researchers from UCLA and their colleagues at the University of Washington documented an unmistakable uptick in patients seeking treatment for

coughs. The increase began the week of Dec. 22, 2019, and persisted through the end of February.

"A significantly higher number of patients with respiratory complaints and diseases starting in late December 2019 and continuing through February 2020 suggests community spread of SARS-CoV-2 prior to established clinical awareness and testing capabilities," wrote the team led by Dr. Joann Elmore, who is both an internist and professor of health policy and management at UCLA.

Hence, the NCV may have been silently spreading in California as early as last December — more than a month before the first US case was detected, a local official claims. The theory helps explain why California started getting so many cases of so-called community spread. "That means the virus is in the community already — not, as was suspected by the CDC, as only in China and being spread from contact with China."

## Conclusion

Owing to the high vigilance of Chinese doctors and effectiveness of Chinese early warning mechanism against infectious diseases, NCV was first discovered in Wuhan, which is the good luck for human being in misfortune. China also demonstrated effectiveness of its combating measures to contain the NCV. However, the above-mentioned eight evidences of NCV origin-related discoveries showed definitely that NCV was not originated in Wuhan. We don't know the exact origin of NCV yet. The global scientific community have a urgent task to work together to find out the real origin of NCV, so that human being will be able to avoid the same misfortune. In this regard, as Science Magazine expressed that Trump and US government owe Chinese an apology .

稿件来源: 北美华协网 <http://www.cmaona.org>

附中文:

# 新冠病毒的各种发现描绘了其起源的不同图景

2019年12月8日,引起新冠肺炎大流行的新型冠状病毒(新冠病毒)在武汉被首次发现,即SARS-CoV-2。中国科学家快速分离和鉴定该疾病,并于2019年12月31日通报给世卫组织。中国于2020年1月12日共享了新冠病毒的基因序列,这对其他国家针对该病毒开发特定的诊断工具具有重要意义。世卫组织于2020年1月宣布国际关注的公共卫生紧急状态,并于2020年3月宣布大流行。截至2020年10月19日,189个国家和地区报告了4020万例病例。它已经造成110万人死亡,超过2760万人已经康复。但据世界卫生组织估计,总共约有8亿人受到感染。

《科学》杂志今年7月24日报道,武汉病毒学研究所和华中农业大学的研究人员在武汉周边和湖北省其他地方采集的养殖畜禽样本中没有发现新冠病毒。湖北多年的监测从未发现过接近SARS-CoV-2的蝙蝠冠状病毒,这表明新冠病毒从动物到人类的跳跃发生在其他地方。

由于大流行可能发生在世界任何地方,我们需要科学地研究它的起源和演变。尽管新冠病毒是在武汉首次发现的,但后来的一些证据表明它早于武汉在其他地方存在。

## 1. 西班牙在2019年3月12日的废水样本中检测出新冠病毒

路透社6月27日报道,西班牙病毒学家在2019年3月收集的巴塞罗那废水样本中发现了新冠病毒的踪迹,而这一样本是在中国发现新冠肺炎疾病前9个月收集的。在线杂志Medrxiv.org网站发表了这项研究,并总结说“早在宣布第一例新冠肺炎病例之前,就在巴塞罗那污水中检测到了SARS-CoV-2,这表明在报告第一例输入性病例之前,人群中就存在这种感染。对废水中的SARS-CoV-2进行哨点监测,可在未来出现新冠肺炎流行时立即采取措施”。

## 2. 日本于2019年8月检测出血样新

## 冠病毒阳性

日本厚生劳动省于2020年5月15日发布报告称,为评估新冠病毒检测试剂盒的性能,该省对2019年1月至3月在日本甲信越地区采集的500份献血样本进行了检测。500样本中有2个显示阳性结果,表明发现有2人感染了新冠病毒。

## 3. 法国将“零号病人”追溯到2019年11月16日

法国东北部科尔马市的研究人员最近宣布,他们确定了2019年11月16日和11月18日的两次X光片,显示出他们所说的与新冠病毒一致的症状。如果11月的病例得到证实,这意味着病毒在欧洲传播了整整两个月后,法国才宣布它的新冠肺炎感染病例,这个时间甚至在中国武汉证实有疫情之前。

## 4. 巴西在2019年11月的污水样本中发现了新冠病毒

Medrxiv.org网站,发表了一篇题为2019年11月在巴西圣塔卡塔琳娜发现SARS-CoV-2”的文章。作者分析了1019年10月底至今年3月初巴西封锁期间弗洛里亚诺波利斯(巴西圣塔卡塔琳娜)的人类污水。他们在2019年11月27日独立采集的两份样本中检测到SARS-CoV-2,随后的采样在报告巴西第一例的新冠肺炎感染的2020年3月4日之前都呈阳性(与圣塔卡塔琳娜报告的第一例新冠肺炎病例一致),而且废水中SARS-CoV-2的含量一直在增加。这些结果表明,自2019年11月下旬起,SARS-CoV-2就在巴西传播,早于武汉的第一例报告病例。

## 5. 意大利在2019年12月18日的污水样本中也检测到了新冠病毒

国际特殊技能研究所周五在法新社发表的一份声明中说,意大利研究人员从2019年10月至2020年2月对40个废水样本进行了检测,并在2019年12月18日米兰和都灵以及2020年1月29日在博洛尼亚采集的废水样本中发现了

SARS-CoV-2的基因痕迹。该结果在两个不同的实验室用两种不同的方法进行了确认,结果显示在米兰和都灵采集的去年12月的样本中存在SARS-CoV-2。因此,在发现第一个例病例的两个多月前,新冠病毒已经出现在意大利的两个大城市。这表明,该病毒在意大利出现的时间与中国首次报道的时间大致相同。

## 6. 贝尔维尔市长宣布他的新冠病毒感染发生在2019年11月中旬

美国新泽西州贝尔维尔市市长迈克尔·梅勒姆于2020年4月29日被检测出新冠病毒抗体阳性。但他相信,他是在2019年11月染上这种病毒的,比中国医生首次报告新冠病毒病例早了一个多月。梅勒姆说,他在2019年11月19日至21日在大西洋城举行的市政联盟会议后离开时,病得发冷,产生幻觉,体温骤升。梅勒姆在一份新闻稿中说:“感觉我就像是一个戒毒的瘾君子,我不知道发生了什么,我从来没有觉得自己会病得这么厉害。”

## 7. 疾病预防控制中心主任承认,死后尸体检测发现了一些新冠病毒死亡病例

美国有线电视新闻网(CNN)在2020年3月11日报道说,在众议院监督委员会关于新冠病毒应对的讨论中,CDC主任罗伯特·雷德菲尔德博士说,已经发现了一些死于新冠病毒的死亡病例。众议员格雷·鲁达问雷德菲尔德,“是否有可能有些流感患者被误诊,实际上感染了冠状病毒。”雷德菲尔德说:“标准做法是,你要做的第一件事就是检测流感,所以如果他们感染了流感,他们就会呈阳性。”

鲁达接着问雷德菲尔德他们是否在做死后尸体测试。雷德菲尔德说,CDC已经建立了“肺炎死亡监测系统;这并不是每个城市、每个州、每个医院都有。”鲁达接着问:“那么有可能美国的一些人死于流感的人,而实际上可能是死

于冠状病毒”?雷德菲尔德回答说:“今天在美国,有些病例确实是这样诊断出来了”。这次听证会也被录像记录下来了。

## 8. 加州大学洛杉矶分校公布新冠肺炎去年12月在洛杉矶悄无声息地传播

加州大学洛杉矶分校发表了一项研究结果,称去年12月新冠肺炎在洛杉矶悄然传播。加州大学洛杉矶分校的研究人员和他们在华盛顿大学的同事们记录了寻求治疗咳嗽的病人明显增加。这种增长始于2019年12月22日的一周,一直持续到今年2月底。

乔安·埃尔莫尔博士领导的研究小组写道:“从2019年12月下旬开始,一直持续到2020年2月,患有呼吸道症状和疾病的患者数量显著增加,这表明在建立好新冠病毒临床认知和检测能力之前,SARS-CoV-2已经在社区内传播。埃尔莫尔博士是加州大学洛杉矶分校的内科医师和卫生政策与管理教授。

因此,新冠病毒可能早在去年12月就在加州悄然传播。一位当地官员称,这比美国公开的首例被检测到的新冠病毒个案早一个多月。这个理论有助于解释为什么加州开始出现这么多所谓的社区传播病例。“这意味着病毒已经在社区传播了,而不是像疾控中心怀疑的那样,只是在中国传播,而且是通过与中国接触才传播的。”

## 结论

得益于中国医生的高度警惕性和中国传染病预警机制的有效性,新冠病毒首次在武汉被发现,这是人类遭遇不幸时的万幸。中国还展示了遏制新冠病毒的有效打击措施。然而,上述8个与新冠病毒起源有关的证据明确表明新冠病毒并非起源于武汉。我们还不知道新冠病毒的确切来源,全球科学界迫切需要共同努力,找出新冠病毒的真正起源,使人类能够避免同样的不幸。在这方面,正如《科学》杂志所说,特朗普和美国政府欠中国人一个道歉。