

Twitter Thread by Billy Bostickson ■■&■ ■

Billy Bostickson ■■&■ ■

[@BillyBostickson](#)



Meet Yang Ruifu, CCP's biological weapons expert <https://t.co/JjB9TLEO95> via [@Gnews202064](#)

Interesting expose of China's top bioweapons expert who oversaw fake pangolin research

Paper 1: <https://t.co/TrXESKLYmJ>

Paper 2:

<https://t.co/9LSJTNCn3l>

Pangolin

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



Ruifu, obviously obsessed with PLAGUE,

<https://t.co/7A9NiRINoz>

is a friend of Oliver Pybus (one of the Holmes, Andersen, Rambaut, Lipkin Gang)

Oliver Pybus helped Ruifu pump out CCP Propaganda

see next tweet

Pybus and Ruifu

An investigation of transmission control measures during the first 50 days of the COVID-19 epidemic in China

<https://t.co/fl8yh0PSI8>

and

China's control measures may have prevented 700,000 COVID-19 cases

<https://t.co/mAlZh05mmA>

Email for academic queries:

tianhuaiyu@gmail.com (H.T.);

christopher.dye@zoo.ox.ac.uk (C.D.); oliver.pybus@zoo.ox.ac.uk (O.G.P.);

grenfell@princeton.edu (B.T.G.)

ruifuyang@gmail.com (R.Y.)

An investigation of transmission control measures during the first 50 days of the COVID-19 epidemic in China

Huaiyu Tian^{1,*†}, Yonghong Liu^{1,*},  Yidan Li^{1,*},  Chieh-Hsi Wu^{2,*},  Bin Chen^{3,*},  Moritz U. G. Kraemer^{4,5,6}, Bingying Li¹,  Jun Cai⁷,  Bo Xu⁷,  Qiqi Yang¹,  Ben Wang¹, Peng Yang⁸, Yujun Cui⁹,  Yimeng Song¹⁰, Pai Zheng¹¹, Quanyi Wang⁸,  Ottar N. Bjornstad^{12,13}, Ruifu Yang^{9,†}, Bryan T. Grenfell^{14,15,†},  Oliver G. Pybus^{4,†},  Christopher Dye^{4,16,†}

¹State Key Laboratory of Remote Sensing Science, College of Global Change and Earth System Science, Beijing Normal University, Beijing, China.

²School of Mathematical Sciences, University of Southampton, Southampton, UK.

³Department of Land, Air and Water Resources, University of California Davis, Davis, CA, USA.

⁴Department of Zoology, University of Oxford, Oxford, UK.

⁵Harvard Medical School, Harvard University, Boston, MA, USA.

⁶Boston Children's Hospital, Boston, MA, USA.

⁷Ministry of Education Key Laboratory for Earth System Modeling, Department of Earth System Science, Tsinghua University, Beijing, China.

⁸Beijing Center for Disease Prevention and Control, Beijing, China.

⁹State Key Laboratory of Pathogen and Biosecurity, Beijing Institute of Microbiology and Epidemiology, Beijing, China.

¹⁰Department of Urban Planning and Design, The University of Hong Kong, Hong Kong.

¹¹Department of Occupational and Environmental Health Sciences, School of Public Health, Peking University, China.

¹²Center for Infectious Disease Dynamics, Department of Biology, Pennsylvania State University, University Park, PA, USA.

¹³Department of Entomology, College of Agricultural Sciences, Pennsylvania State University, University Park, PA, USA.

¹⁴Division of International Epidemiology and Population Studies, Fogarty International Center, National Institutes of Health, Bethesda, MD, USA.

¹⁵Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ, USA.

¹⁶Oxford Martin School, University of Oxford, Oxford, UK.

*†Corresponding author. Email: tianhuaiyu@gmail.com (H.T.); christopher.dye@zoo.ox.ac.uk (C.D.); oliver.pybus@zoo.ox.ac.uk (O.G.P.); grenfell@princeton.edu (B.T.G.); ruifuyang@gmail.com (R.Y.)

Original title: South China Agricultural University found that pangolin is a potential intermediate host for the new coronavirus

At 1 am on February 7, South China Agricultural University announced on its official WeChat: South China Agricultural University, Lingnan Modern Agricultural Science and Technology Guangdong Laboratory Professor Shen Yongyi, Professor Xiao Lihua and other researchers have joined forces with the Academy of Military Medicine of the Chinese People' s Liberation Army Academy of Military Sciences The latest research conducted by researcher Yang Ruifu and senior veterinarian Chen Wu from Guangzhou Zoo's scientific research department shows that pangolins are potential intermediate hosts of the new coronavirus. This latest discovery will be of great significance to the prevention and control of the source of the new coronavirus. (Yangcheng Evening News reporter Zhang Luyao)

BEIJING ON BIOHAZARDS:

Chinese Experts on Bioweapons Nonproliferation Issues

<https://t.co/HP8RVAO152>

1. INTRODUCTION — <i>Amy E. Smithson</i>	1
2. CONTEMPLATING THE THREAT OF BIOLOGICAL WEAPONS PROLIFERATION— <i>Liu Jianfei</i>	13
3. LABORATORY BIOSAFETY OF PATHOGENIC MICROORGANISM IN CHINA— <i>Li Jinsong</i>	31
4. CHINESE BIOSAFETY LAWS AND REGULATIONS, INCLUDING MATTERS OF BIOSECURITY AND OVERSIGHT OF GENETIC ENGINEERING ACTIVITIES— <i>Hu Longfei, Xiang Dapeng, Shi Yongxia, Huang Jicheng, Zheng Kui, Hong Ye, Li Xiaobo, and Xing Luqin</i>	47
5. EFFORTS TO STRENGTHEN BIOSAFETY AND BIOSECURITY IN CHINA— <i>Wang Qian</i>	71
6. BIOLOGICAL INSPECTIONS IN IRAQ: LESSONS FOR BWC COMPLIANCE AND VERIFICATION— <i>Yang Ruifu</i>	91
7. PUTTING THE NON-PROLIFERATION OF BIOLOGICAL WEAPONS ON THE RIGHT TRACK— <i>Pan Zhenqiang</i>	107
8. OBSERVATIONS ON CHINA'S NEW BIOSAFETY AND BIOSECURITY FRAMEWORK — <i>Julie E. Fischer</i>	131
9. READING THE NONPROLIFERATION TEALEAVES FROM <i>BEIJING ON BIOHAZARDS</i> ESSAYS — <i>Bates Gill</i>	137
APPENDIX: CHINA'S CURRENT LAWS AND REGULATIONS RELATED TO BIOSAFETY, BIOSECURITY, OVERSIGHT OF ACTIVITIES INVOLVING GENETIC ENGINEERING, BIOSAFETY EQUIPMENT AND FACILITIES, MANAGEMENT OF MEDICAL WASTES, AND STORAGE, PACKING, AND SHIPMENT OF PATHOGENS.....	A

Biological Inspections in Iraq:

Lessons for BWC Compliance and Verification

Yang Ruifu, Ph.D

<https://t.co/7hL8ic9RWr>

442009CB522600

Important pathogenic bacterial micro-evolution studies

The people's Liberation Army Military Academy of Medical Sciences microbial epidemic disease research Institute

Yang RuiFu

<https://t.co/n5nOc6CjTo>

Spot the difference

Novel coronavirus information

2020-04/2020-02-07

CAS Chengdu literature intelligence Kunming

1. (Left) English translation of 2. original Chinese (Top Right) 3. Linked Article (lower right) from south china agricultural university

<https://t.co/FHKwLUzTJb>

The spread of the virus

Pangolin is a novel coronavirus, the potential intermediate host

(Source : South China Agricultural University

South China Agricultural University, Lingnan modern agricultural science and technology, Guangdong province, the laboratory sink in everlasting righteousness teach
Granted, Xiao Lihua Professor and other researchers combined the people's Liberation Army
Academy of Military Sciences of the Military Medical Research Institute Yang Rui Fu researcher and Guangzhou Zoo research Department Chen Wu, senior veterinarian to carry out the most
New research suggests that pangolin is the new coronavirus potential intermediate hosts. This latest discovery will
The novel coronavirus to the source of prevention and control is of great significance.

Release time: 2020-02-07; and

Link address <https://www.scau.edu.cn/2020/0207/c1300a219015/page.htm>

Yang Ruifu likes his Plague Needles nice and sharp!

An Interaction between the Inner Rod Protein YscI and the Needle Protein YscF Is Required to Assemble the Needle Structure of the Yersinia Type Three Secretion System

<https://t.co/adfWjRd11E>

and

<https://t.co/EerlqC6uBi>

Abstract

The type III secretion system is a highly conserved virulence mechanism that is widely distributed in Gram-negative bacteria. It has a syringe-like structure composed of a multi-ring basal body that spans the bacterial envelope and a projecting needle that delivers virulence effectors into host cells. Here, we showed that the *Yersinia* inner rod protein YscI directly interacts with the needle protein YscF inside the bacterial cells and that this interaction depends on amino acid residues 83–102 in the carboxyl terminus of YscI. Alanine substitution of Trp-85 or Ser-86 abrogated the binding of YscI to YscF as well as needle assembly and the secretion of effectors (Yops) and the needle tip protein LcrV. However, *yscI* null mutants that were *trans*-complemented with YscI mutants that bind YscF still assembled the needle and secreted Yops, demonstrating that a direct interaction between YscF and YscI is critical for these processes. Consistently, YscI mutants that did not bind YscF resulted in greatly decreased HeLa cell cytotoxicity. Together, these results show that YscI participates in needle assembly by directly interacting with YscF.

bacterial pathogenesis **protein assembly** **protein-protein interaction**
type III secretion system (T3SS) **Western blotting** **Yersinia pestis** **inner rod protein**
needle assembly **needle protein**

What a small world..

Journal of Biosafety and Biosecurity Editorial Board

<https://t.co/eMh9kr6M3t>

Ruifu Yang, Linfa Wang, Herve Raoul, James Le Duc, Jens Kuhn, Deyin Guo, David Franz (Ecohealth)

Donglin Song

National Biosafety Laboratory in Wuhan, Wuhan Institute of Virology, CAS, Wuhan, China

Kathrin Summermatter

Division of Safety, Institute of Virology and Immunology, Mittelhäusern, Switzerland

Jianwei Wang

Institute of Pathogen Biology, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

Linfu Wang

Programme in Emerging Infectious Disease Duke-NUS Medical School, Singapore

Ruifu Yang

Beijing Institute of Microbiology and Epidemiology, Beijing, China

Weiwen Zhang

Center for Biosafety Research and Strategy, Laboratory of Synthetic Microbiology, School of Chemical Engineering and Technology, Tianjin University, Tianjin, China

Deja Vu? - The curse of Authoritarianism

China's Missed Chance

<https://t.co/axn7sxyjVK>

HONGTAO's "CHLAMYDIA HYPOTHESIS" <https://t.co/OurRjr6OJz>

Yang Ruifu & Zhu Qingyu (Top-Right) had pictures of the new coronavirus (Lower-Right) on 26 February—but they kept quiet about it.

BEIJING -- In mid-March, severe acute respiratory syndrome (SARS) began spiraling out of control. A doctor staying in room 911 of the Metropole Hotel in Hong Kong had infected 12 other people, who in turn had sown new cases around the planet. Shaken by the acute danger, officials at the World Health Organization (WHO) in Geneva issued a "global alert" on 12 March; 5 days later, they recruited 11 labs around the world in a joint, feverish hunt for the cause of the new disease.

What almost nobody knew was that in a well-equipped lab in southern Beijing, a group of virologists had already discovered a new virus in samples from some of the earliest patients. They had grown it in cell cultures and suckling mice and taken snapshots using their electron microscope. The virus, they had noticed, had a distinctive halo of spikes that put it in a family not known to kill humans: the coronaviruses. By the first week of March, the group had tentative evidence that the new virus might indeed be linked to the epidemic. There was just one problem. They didn't dare tell the world.

At the time, the official line in China was that atypical pneumonia, as it was then called, was caused by a Chlamydia bacterium, says Yang Ruifu, a soft-spoken microbiologist and a member of the team at the Academy of Military Medical Sciences (AMMS) that discovered the coronavirus. Promoted by Hong Tao, an esteemed senior microbiologist and member of the Chinese Academy of Engineering, the Chlamydia hypothesis had become so well established that "it would not have been respectful" to challenge it, Yang says. Indeed, others say, the Ministry of Health had effectively banned alternative views.

And so the team did not seek media attention for its discovery; nor did it alert any of the labs in the WHO network. If the researchers had, they might have accelerated the collective odyssey by days, if not weeks, says Klaus Stohr, the German virologist coordinating the WHO network. "These scientists were the first ever to see the SARS virus," says Stohr, who recently visited AMMS. "And we had no idea." A call or an e-mail to Stohr might also have ensured Yang and his colleagues a more prominent place in the history of the disease and perhaps even a publication or two in a prestigious scientific journal. "We were too cautious," Yang now says ruefully. "We waited too long."