From: Fauci, Anthony (NIH/NIAID) [E]

To: Collins, Francis (NIH/OD) [E]; Jeremy Farrar

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Date: Tuesday, February 4, 2020 6:23:47 AM

(b) (5)	Very thoughtful summary and analysis. We really need to get WHO moving on ge	etting
the co	nvening started.	
Sent: 7	Collins, Francis (NIH/OD) [E] Guesday, February 4, 2020 6:12 AM emy Farrar (b) (6)	
	uci, Anthony (NIH/NIAID) [E] (b) (6)	
	t: RE: Prevalence of infection and stage of the epidemic in Wuhan	
Yes,	(b) (c	4)
Franci	S	
Sent: ☐ To: Co Cc: Fau	Jeremy Farrar (b) (6) Tuesday, February 4, 2020 6:08 AM Ilins, Francis (NIH/OD) [E] (b) (6) (ci, Anthony (NIH/NIAID) [E] (b) (6) (ct: Re: Prevalence of infection and stage of the epidemic in Wuhan	(b) (4)
	On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E] (b) (6) wrote:	
	Very thoughtful analysis. (b)	(4)
	(b)	(4)
	Francis	_
	From: Jeremy Farrar (b) (6) Sent: Tuesday, February 4, 2020 2:01 AM To: Fauci, Anthony (NIH/NIAID) [E] (b) (6) (b) (6)]
	Subject: FW: Prevalence of infection and stage of the epidemic in Wuhan Please treat in confidence – a very rough first draft from Eddie and team – they will send on the edited, cleaner version later. Pushing WHO again today	
	From: Edward Holmes (b) (6)	
	Date: Tuesday, 4 February 2020 at 06:33	
	To: Jeremy Farrar (b) (6)	
	Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan	

Here's our summary so far. Will be edited further.

It's fundamental science and completely neutral as written. Did not mention other anomalies as this will make us look like loons. As it stands it is excellent basic science I think, which is a service in itself.

Will finish as soon as we can.

PROFESSOR EDWARD C. HOLMES FAA FRS

ARC Australian Laureate Fellow

THE UNIVERSITY OF SYDNEY

Marie Bashir Institute for Infectious Diseases & Biosecurity, School of Life & Environmental Sciences and School of Medical Sciences, The University of Sydney | Sydney | NSW | 2006 | Australia

T (b) (6) (b) (6)

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan Date: Tuesday, February 4, 2020 6:26:53 AM Francis, (b) (4) Larry (b) (6) **From:** Francis Collins Date: Tuesday, February 4, 2020 at 6:12 AM (b) (6) **To:** "Tabak, Lawrence (NIH/OD) [E]" **Subject:** FW: Prevalence of infection and stage of the epidemic in Wuhan More... From: Collins, Francis (NIH/OD) [E] Sent: Tuesday, February 4, 2020 6:12 AM **To:** Jeremy Farrar (b)(6)Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)Yes, Francis (b) (6) **From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 6:08 AM To: Collins, Francis (NIH/OD) [E] Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)(b) (6) wrote: On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E] (b) (4) Very thoughtful analysis. (b) (4) Francis (b)(6)**From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 2:01 AM **To:** Fauci, Anthony (NIH/NIAID) [E] (b) (6); Collins, Francis (NIH/OD) [E] **Subject:** FW: Prevalence of infection and stage of the epidemic in Wuhan Please treat in confidence – a very rough first draft from Eddie and team – they will

From:

To:

Tabak, Lawrence (NIH/OD) [E] Collins, Francis (NIH/OD) [E]

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Pushing WHO again today

From: Edward Holmes (b) (6) >

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To: Jeremy Farrar (b) (6)

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T (b) (6) (b) (6)

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan Date: Tuesday, February 4, 2020 9:07:10 AM Exactly! (b)(6)**From:** "Fauci, Anthony (NIH/NIAID) [E]" Date: Tuesday, 4 February 2020 at 13:18 (b) (6), Jeremy Farrar (b)(6)**To:** Francis Collins **Subject:** RE: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)?? Anthony S. Fauci, MD **Director National Institute of Allergy and Infectious Diseases Building 31, Room 7A-03** 31 Center Drive, MSC 2520 **National Institutes of Health** Bethesda, MD 20892-2520 (b)(6)Phone: FAX: (301) 496-4409 (b) (6) E-mail: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The National Institute of Allergy and Infectious Diseases (NIAID) shall not accept liability for any statements made that are the sender's own and not expressly made on behalf of the NIAID by one of its representatives. (b)(6)From: Collins, Francis (NIH/OD) [E] Sent: Tuesday, February 4, 2020 6:12 AM (b)(6)**To:** Jeremy Farrar (b)(6)Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan (b) (4) Yes, Francis (b)(6)**From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 6:08 AM (b)(6)To: Collins, Francis (NIH/OD) [E] (b)(6)Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)

On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E]

(b) (6) wrote:

From:

To:

Jeremy Farrar

Fauci, Anthony (NIH/NIAID) [E]; Collins, Francis (NIH/OD) [E]

Very thoughtful analysis.	(b) (4)
very thoughtrui undrysis.	(b) (4)
Francis	
From: Jeremy Farrar (b) (6)	
Sent: Tuesday, February 4, 2020 2:01 AM	
To: Fauci, Anthony (NIH/NIAID) [E] (b) (6) (7); Collins, Francis	s (NIH/OD) [E]
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T (b) (6) (b) (6)

From: Fauci, Anthony (NIH/NIAID) [E]
To: Collins, Francis (NIH/OD) [E]
Subject: names for WHO working group
Date: Tuesday, February 4, 2020 7:36:52 AM

Francis:

(b) (5)

Thanks,

Tony

Anthony S. Fauci, MD

Director

National Institute of Allergy and Infectious Diseases

Building 31, Room 7A-03 31 Center Drive, MSC 2520 National Institutes of Health Bethesda, MD 20892-2520

Phone: (b) (6)

FAX: (301) 496-4409

E-mail: (b) (6)

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From: Jeremy Farrar Collins, Francis (NIH/OD) [E]; Fauci, Anthony (NIH/NIAID) [E] To: Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan Date: Tuesday, February 4, 2020 3:27:55 PM Wild West..... (b)(6)**From:** Francis Collins Date: Tuesday, 4 February 2020 at 20:23 (b) (6), "Fauci, Anthony (NIH/NIAID) [E]" **To:** Jeremy Farrar (b) (6) **Subject:** RE: Prevalence of infection and stage of the epidemic in Wuhan (b) (4) (b)(6)From: Jeremy Farrar Sent: Tuesday, February 4, 2020 9:03 AM (b) (6); Collins, Francis (NIH/OD) [E] **To:** Fauci, Anthony (NIH/NIAID) [E] Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan Exactly! (b)(6)**From:** "Fauci, Anthony (NIH/NIAID) [E]" Date: Tuesday, 4 February 2020 at 13:18 (b) (6) (b) (6), Jeremy Farrar **To:** Francis Collins **Subject:** RE: Prevalence of infection and stage of the epidemic in Wuhan (b) (4) 55 Anthony S. Fauci, MD **Director National Institute of Allergy and Infectious Diseases Building 31, Room 7A-03** 31 Center Drive, MSC 2520 **National Institutes of Health** Bethesda, MD 20892-2520 (b) (6) Phone: FAX: (301) 496-4409 (b)(6)E-mail: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The National Institute of Allergy and Infectious Diseases (NIAID) shall not accept liability for any statements made that are the sender's own and not expressly made on behalf of the NIAID by one of its representatives. From: Collins, Francis (NIH/OD) [E] Sent: Tuesday, February 4, 2020 6:12 AM

To: Jeremy Farrar

(b) (6)

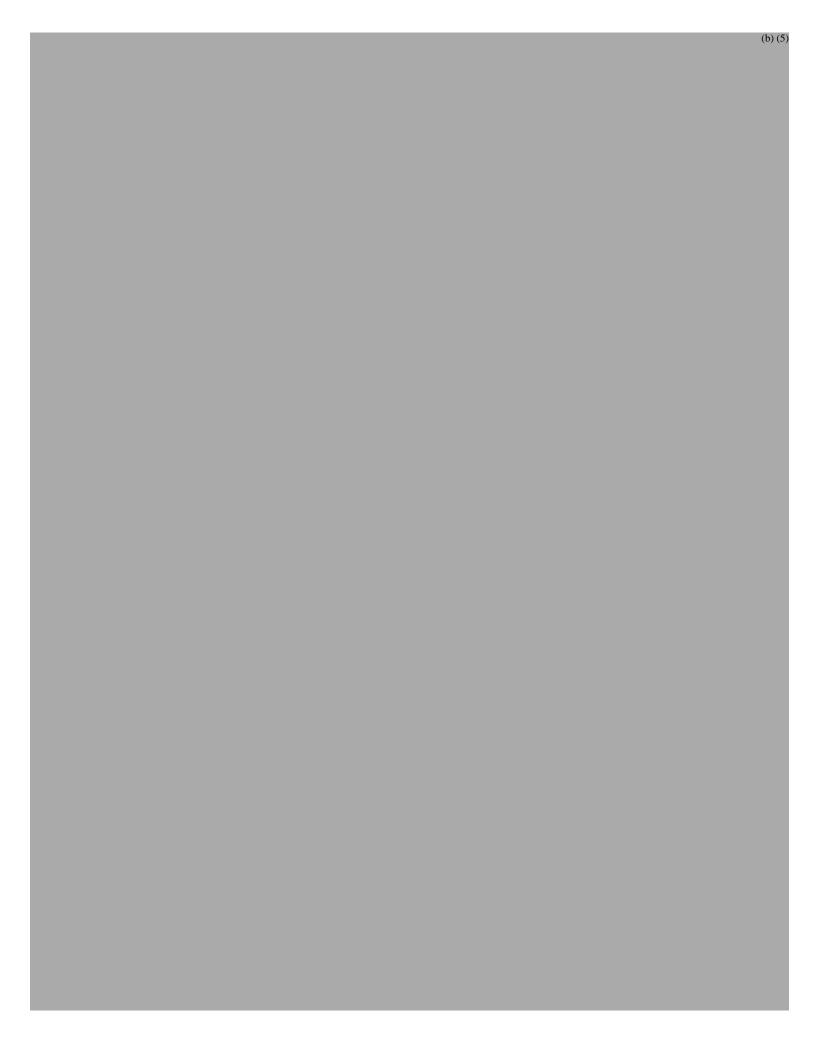
Cc: Fauci, Anthony (NIH/NIAID) [E]

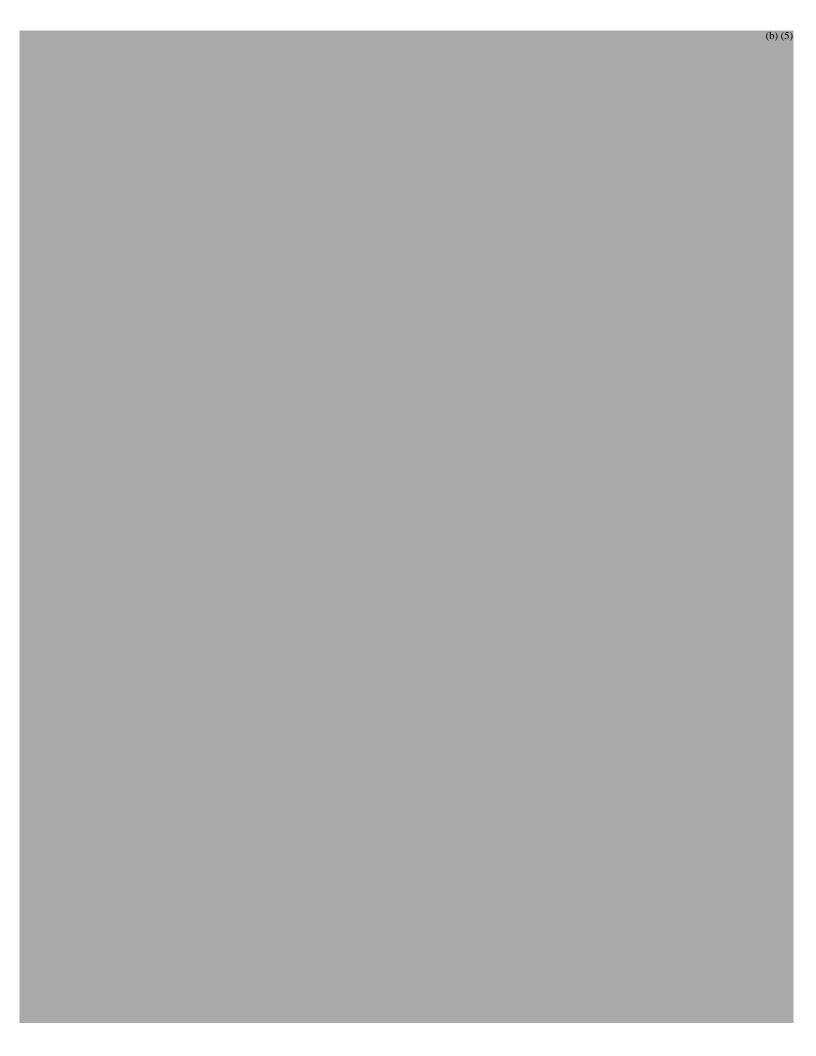
Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Yes,

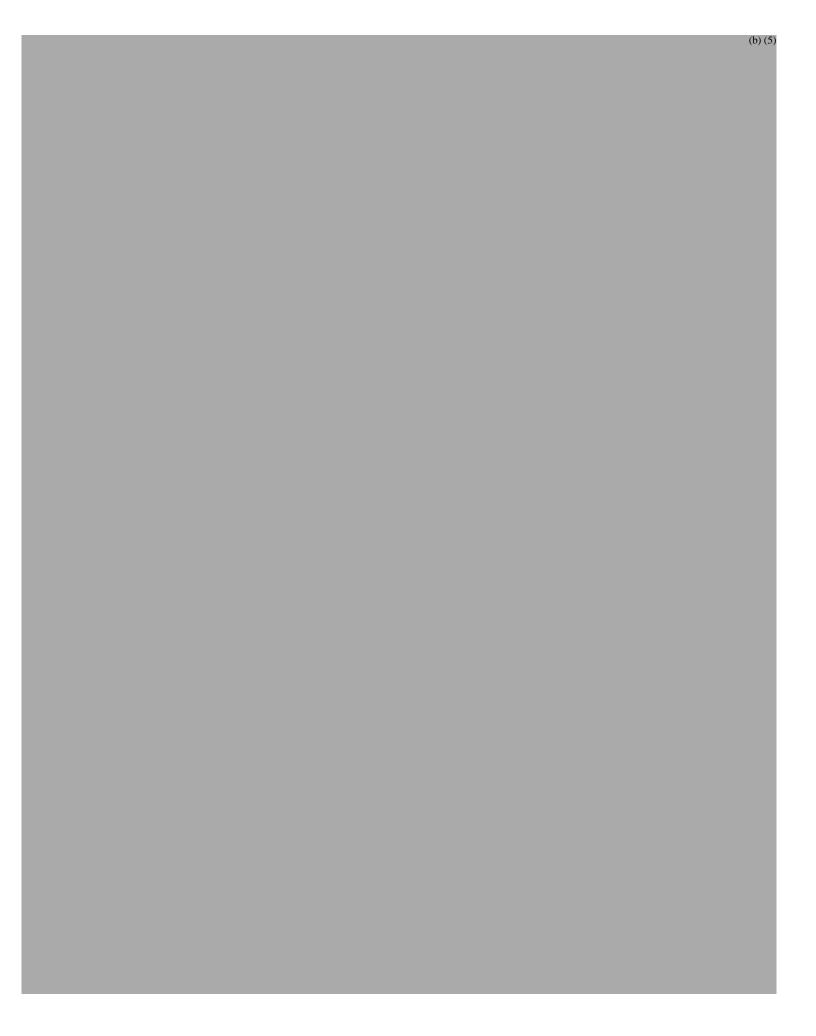
Francis

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THE UNIVERSITY OF SYDNEY Marie Bashir Institute for Infectious Diseases & Biosecurity, School of Life & Environmental Sciences and School of Medical Sciences, The University of Sydney Sydney NSW 2006 Australia T (b) (6)	









To: <u>Collins, Francis (NIH/OD) [E]</u>; <u>Fauci, Anthony (NIH/NIAID) [E]</u>; <u>Edward Holmes</u>

Subject: FW: Origins

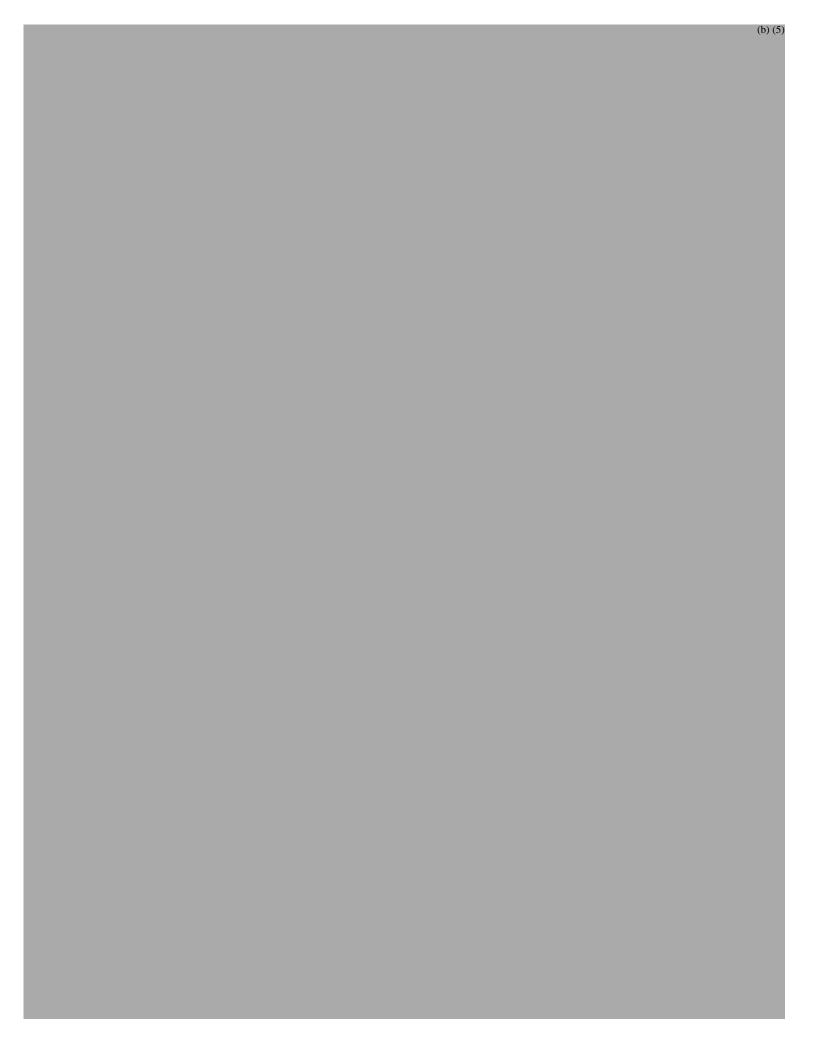
Date: Wednesday, February 5, 2020 1:58:16 AM

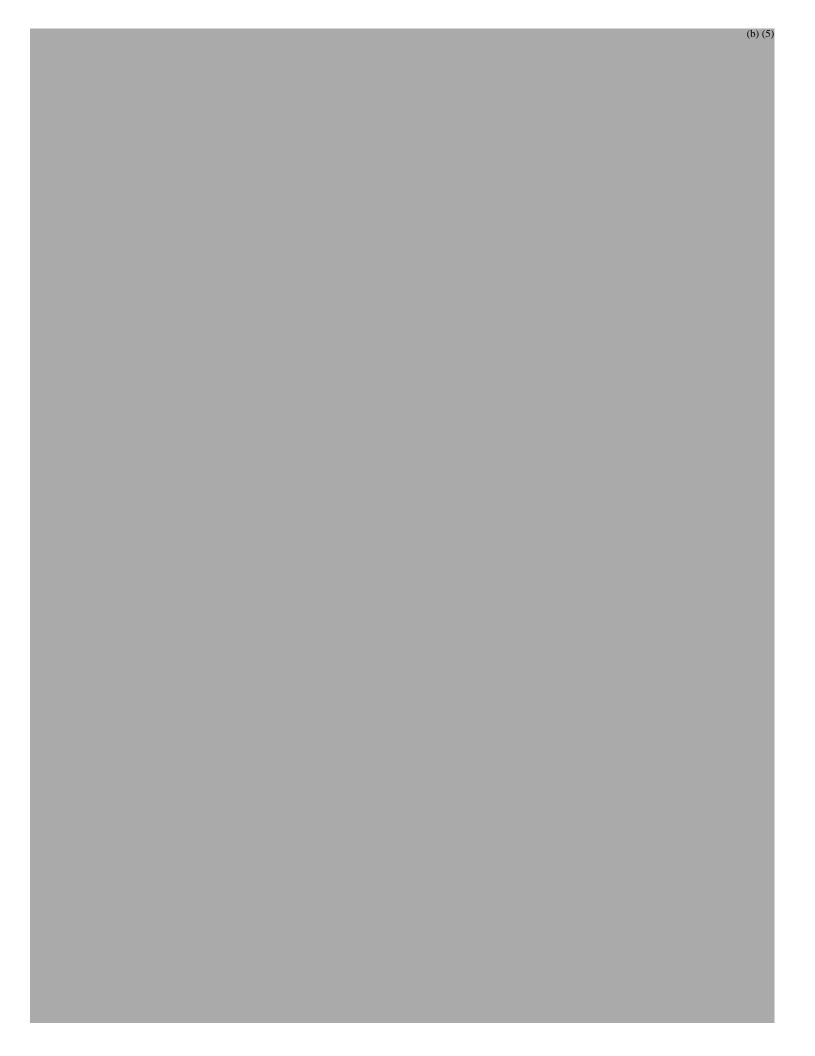
Attachments: Summary.pdf

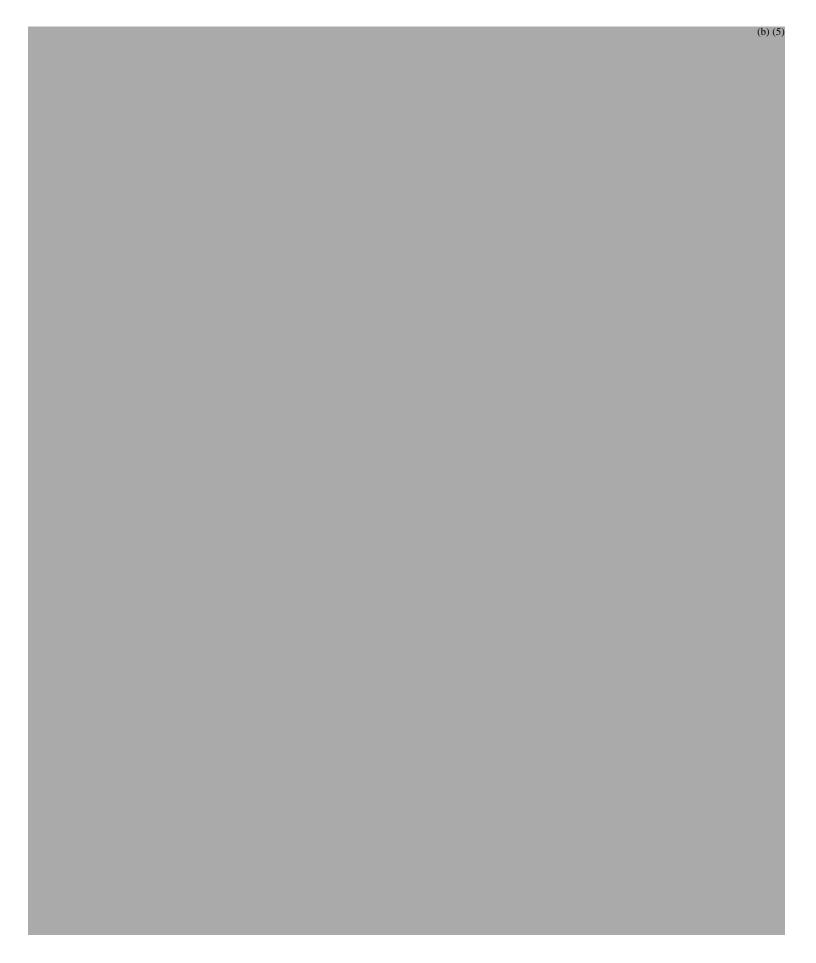
Tony and Francis

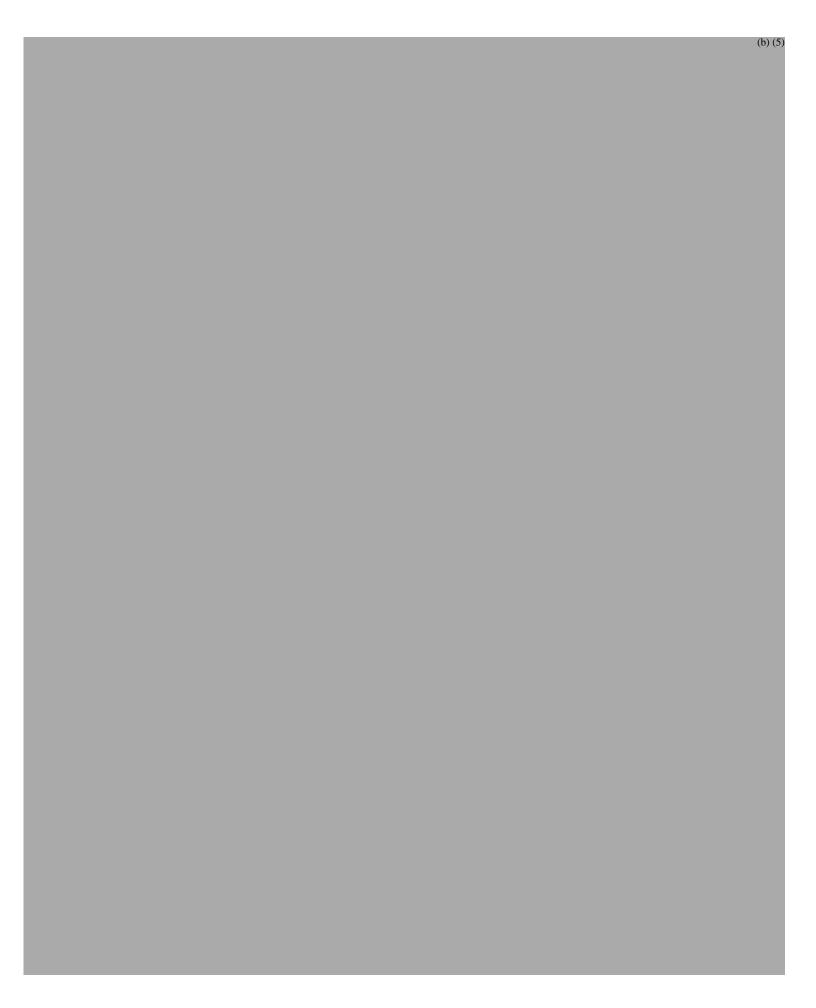
The revised draft from Eddie, copied here.











To: Collins, Francis (NIH/OD) [E]; Fauci, Anthony (NIH/NIAID) [E]

Subject: Origins

Date: Tuesday, February 4, 2020 3:54:37 PM

Attachments: Summary.pdf

Tidied up

Wellcome exists to improve health by helping great ideas to thrive. We support researchers, we take on big health challenges, we campaign for better science, and we help everyone get involved with science and health research. We are a politically and financially independent foundation.

The Wellcome Trust is a charity registered in England and Wales, no. 210183. Its sole trustee is The Wellcome Trust Limited, a company registered in England and Wales, no. 2711000 (whose registered office is at 215 Euston Road, London NW1 2BE, UK)

To: Fauci, Anthony (NIH/NIAID) [E]; Collins, Francis (NIH/OD) [E]

Cc: <u>Josie Golding</u>

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Date: Wednesday, February 5, 2020 6:21:36 AM

Francis and Tony

Couple of things:

- I spoke again with WHO this morning. I believe they have listened and acted. Let me know if you agree
 - At the WHO meeting next week they will set up the Group who will "look at the origins and evolution of 2019n-CoV"
 - They have asked for names to sit on that Group please do send any names
 - We can have a call this week with a core group of that to frame the work of the Group including if you could join?
 - I think this puts it under the umbrella of WHO, with action this week and into next
 - With names to be put forward into the Group from us and pressure on this group from your and our teams next week.
- The team will update the draft today and I will forward immediately they will add further comments on the glycans

Does that sound reasonable to you?

Jeremy

From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Tuesday, 4 February 2020 at 13:18

To: Francis Collins (b) (6), Jeremy Farrar (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

?? (b) (4)

Anthony S. Fauci, MD

Director

National Institute of Allergy and Infectious Diseases

Building 31, Room 7A-03 31 Center Drive, MSC 2520 National Institutes of Health Bethesda, MD 20892-2520

Phone: (b) (6) FAX: (301) 496-4409

E-mail: (b) (6)

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Sent: Tuesday, February 4, 2020 6:12 AM **To:** Jeremy Farrar

(b) (6)

Cc: Fauci, Anthony (NIH/NIAID) [E] (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)Yes, Francis (b)(6)**From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 6:08 AM **To:** Collins, Francis (NIH/OD) [E] (b)(6)Cc: Fauci, Anthony (NIH/NIAID) [E] **Subject:** Re: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)(b) (6) wrote: On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E] (b)(4)Very thoughtful analysis (b) (4) Francis (b)(6)**From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 2:01 AM **To:** Fauci, Anthony (NIH/NIAID) [E] (b) (6); Collins, Francis (NIH/OD) [E] **Subject:** FW: Prevalence of infection and stage of the epidemic in Wuhan Please treat in confidence – a very rough first draft from Eddie and team – they will send on the edited, cleaner version later. Pushing WHO again today (b) (6) **From:** Edward Holmes Date: Tuesday, 4 February 2020 at 06:33 (b) (6) **To:** Jeremy Farrar **Subject:** Re: Prevalence of infection and stage of the epidemic in Wuhan Here's our summary so far. Will be edited further. It's fundamental science and completely neutral as written. Did not mention other anomalies as this will make us look like loons. As it stands it is excellent basic science I think, which is a service in itself. Will finish as soon as we can. PROFESSOR EDWARD C. HOLMES FAA FRS ARC Australian Laureate Fellow

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T E (b) (6)
 From:
 Fauci, Anthony (NIH/NIAID) [E]

 To:
 Collins, Francis (NIH/OD) [E]

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Date: Wednesday, February 5, 2020 6:55:51 PM

My mistake. Sorry. Battle fatigue. I will write to Jeremy now and include her

Anthony S. Fauci, MD

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From: Collins, Francis (NIH/OD) [E] (b) (6)

Sent: Wednesday, February 5, 2020 6:39 PM

To: Fauci, Anthony (NIH/NIAID) [E] (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

(b) (5)

FC

From: Fauci, Anthony (NIH/NIAID) [E] (b) (6)

Sent: Wednesday, February 5, 2020 5:25 PM

To: Jeremy Farrar (b) (6); Collins, Francis (NIH/OD) [E] (b) (6) **Cc:** Josie Golding (b) (6)

Tabak, Lawrence (NIH/OD) [E]

(b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Jeremy:

Thanks for the note. Looks like things are moving along with WHO. I will list below a number of names for potential members of the working group to examine the evolutionary origin of the 2019-nCoV in addition to the individuals who were on the call with us last Saturday:

Harold Varmus – Weill Cornell Medical Center – New York City

Feng Zhang – MIT (CRISPR expert)

Joseph DeRisi - Chan Zuckerberg (CZ) BioHub (he's paying close attention to the Wuhan strain vs other bat viruses and the SARS virus)

Don Ganem - University of California at San Francisco (UCSF) and the CZ BioHub (knows more about hepadnaviruses but an outstanding clinical and basic virologist)

John Coffin - Tufts and National Cancer Institute, NIH (worked out the confusion over the alleged Chronic Fatigue Syndrome retrovirus that proved to be a xenotropic MLV)

Eugene Koonin - NCBI/National Libreary of Medicine, NIH;

https://www.ncbi.nlm.nih.gov/research/groups/koonin/)

Wayne Hendrickson – Columbia University and the New York Structural Biology Center Gary Nabel – Sanofi (Boston)

Best regards, Tony

Anthony S. Fauci, MD
Director
National Institute of Allergy and Infectious Diseases
Building 31, Room 7A-03
31 Center Drive, MSC 2520
National Institutes of Health
Bethesda, MD 20892-2520
Phone:
(b) (6)
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From: Jeremy Farrar	(b) (6)					
Sent: Wednesday, February 5, 2020 6:21 AM						
To: Fauci, Anthony (NIH/NIAID) [E] <		(b) (6); Collins, Francis (NIH/OD) [E]				
(b) (6)						
Cc: Josie Golding	(b) (6)					
Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan						

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- They have asked for names to sit on that Group please do send any names
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From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Tuesday, 4 February 2020 at 13:18

To: Francis Collins (b) (6), Jeremy Farrar (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

?? (b) (4)

Anthony S. Fauci, MD

Director

National Institute of Allergy and Infectious Diseases

Building 31, Room 7A-03 31 Center Drive, MSC 2520 National Institutes of Health Bethesda, MD 20892-2520

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Sent: Tuesday, February 4, 2020 6:12 AM

To: Jeremy Farrar (b) (6

Cc: Fauci, Anthony (NIH/NIAID) [E] (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

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Francis	
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To: Fauci, Anthony (NIH/NIAID) [E] (b) (6) (7); Co	ollins, Francis (NIH/OD) [E]
Subject: FW: Prevalence of infection and stage of the epidemi	c in Wuhan
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PROFESSOR EDWARD C. HOLMES FAA FRS

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The University of Sydney | Sydney | NSW | 2006 | Australia
T
(b) (6)
(b) (6)

To: Fauci, Anthony (NIH/NIAID) [E]; Collins, Francis (NIH/OD) [E]

Cc: Josie Golding; Tabak, Lawrence (NIH/OD) [E]

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Date: Thursday, February 6, 2020 2:18:28 AM

Thank you. Pardis is great, respected by everyone – best wishes Jeremy

From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Thursday, 6 February 2020 at 00:00

To: Jeremy Farrar (b) (6), Francis Collins (b) (6) **Cc:** Josie Golding (b) (6), "Tabak, Lawrence (NIH/OD) [E]"

(b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Jeremy:

I left out an important name for the coronavirus evolution working group. Please include her: Pardis Sabeti at the Broad Institute of MIT and Harvard Thanks,

Tony

Anthony S. Fauci, MD

Director

National Institute of Allergy and Infectious Diseases

Building 31, Room 7A-03 31 Center Drive, MSC 2520 National Institutes of Health Bethesda, MD 20892-2520

Phone: (b) (6) FAX: (301) 496-4409

E-mail: (b) (6)

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From: Fauci, Anthony (NIH/NIAID) [E]

Sent: Wednesday, February 5, 2020 5:25 PM

To: Jeremy Farrar (b) (6); Collins, Francis (NIH/OD) [E]

Cc: Josie Golding (b) (6); Tabak, Lawrence (NIH/OD) [E]

(b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Jeremy:

Thanks for the note. Looks like things are moving along with WHO. I will list below a number of names for potential members of the working group to examine the evolutionary origin of the 2019-nCoV in addition to the individuals who were on the call with us last Saturday:

Harold Varmus – Weill Cornell Medical Center – New York City

Feng Zhang – MIT (CRISPR expert)

Joseph DeRisi - Chan Zuckerberg (CZ) BioHub (he's paying close attention to the Wuhan strain vs other bat viruses and the SARS virus)

Don Ganem - University of California at San Francisco (UCSF) and the CZ BioHub (knows more about hepadnaviruses but an outstanding clinical and basic virologist)

John Coffin - Tufts and National Cancer Institute, NIH (worked out the confusion over the alleged Chronic Fatigue Syndrome retrovirus that proved to be a xenotropic MLV)

Eugene Koonin - NCBI/National Libreary of Medicine, NIH;

https://www.ncbi.nlm.nih.gov/research/groups/koonin/)

Wayne Hendrickson – Columbia University and the New York Structural Biology Center Gary Nabel – Sanofi (Boston)

Best regards, Tony

Anthony S. Fauci, MD
Director
National Institute of Allergy and Infectious Diseases
Building 31, Room 7A-03
31 Center Drive, MSC 2520
National Institutes of Health
Bethesda, MD 20892-2520
Phone:
(b) (6)
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From: Jeremy Farrar

(b) (6)

Sent: Wednesday, February 5, 2020 6:21 AM

To: Fauci, Anthony (NIH/NIAID) [E]

(b) (6)

(c) (b) (6)

Cc: Josie Golding

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Francis and Tony

Couple of things:

- I spoke again with WHO this morning. I believe they have listened and acted. Let me know if you agree
 - At the WHO meeting next week they will set up the Group who will "look at the origins and evolution of 2019n-CoV"
 - They have asked for names to sit on that Group please do send any names
 - We can have a call this week with a core group of that to frame the work of the Group including if you could join?
 - I think this puts it under the umbrella of WHO, with action this week and into next
 - With names to be put forward into the Group from us and pressure on this group from your and our teams next week.
- The team will update the draft today and I will forward immediately they will add further comments on the glycans

Does that sound reasonable to you?

Jeremy

From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Tuesday, 4 February 2020 at 13:18

To: Francis Collins (b) (6), Jeremy Farrar (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

?? (b) (4)

Anthony S. Fauci, MD

Director

National Institute of Allergy and Infectious Diseases

Building 31, Room 7A-03

31 Center Drive, MSC 2520

National Institutes of Health

Bethesda, MD 20892-2520

Phone: (b) (c) FAX: (301) 496-4409

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From: Collins, Francis (NIH/OD) [E] Sent: Tuesday, February 4, 2020 6:12 AM To: Jeremy Farrar (b) (6) Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan	
Yes, (b) (4)	
Francis	
From: Jeremy Farrar Sent: Tuesday, February 4, 2020 6:08 AM To: Collins, Francis (NIH/OD) [E] Cc: Fauci, Anthony (NIH/NIAID) [E] Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan	
	(b) (4)
On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E] (b) (6) wrote:	
Very thoughtful analysis. (b) (4)	
(b) (4)	
Francis	
From: Jeremy Farrar (b) (6) Sent: Tuesday, February 4, 2020 2:01 AM	
To: Fauci, Anthony (NIH/NIAID) [E] (b) (6) (Collins, Francis (NIH/OD) [E]	
Subject: FW: Prevalence of infection and stage of the epidemic in Wuhan	
Please treat in confidence – a very rough first draft from Eddie and team – they will	

send on the edited, cleaner version later.

From: Edward Holmes (b) (6)

Date: Tuesday, 4 February 2020 at 06:33

To: Jeremy Farrar (b) (6)

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Here's our summary so far. Will be edited further.

It's fundamental science and completely neutral as written. Did not mention other anomalies as this will make us look like loons. As it stands it is excellent basic science I think, which is a service in itself.

Will finish as soon as we can.

PROFESSOR EDWARD C. HOLMES FAA FRS

ARC Australian Laureate Fellow

THE UNIVERSITY OF SYDNEY

Marie Bashir Institute for Infectious Diseases & Biosecurity, School of Life & Environmental Sciences and School of Medical Sciences, The University of Sydney | Sydney | NSW | 2006 | Australia

T (b) (6) E (b) (6)

To: Fauci, Anthony (NIH/NIAID) [E]; Collins, Francis (NIH/OD) [E]

Cc: <u>Josie Golding</u>; <u>Tabak, Lawrence (NIH/OD) [E]</u>

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Date: Thursday, February 6, 2020 2:18:30 AM

Perfect, thank you

From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Wednesday, 5 February 2020 at 22:24

To: Jeremy Farrar (b) (6), Francis Collins (b) (6) **Cc:** Josie Golding (b) (6), "Tabak, Lawrence (NIH/OD) [E]"

(b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

Jeremy:

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Sent: Wednesday, February 5, 2020 6:21 AM

To: Fauci, Anthony (NIH/NIAID) [E] (b) (6); Collins, Francis (NIH/OD) [E]

(b) (6) >

Cc: Josie Golding (b) (6)

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Francis and Tony

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Jeremy

From: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Date: Tuesday, 4 February 2020 at 13:18

To: Francis Collins (b) (6), Jeremy Farrar (b) (6)

Subject: RE: Prevalence of infection and stage of the epidemic in Wuhan

?? (b) (4

Director National Institute of Allergy and Infectious Diseases Building 31, Room 7A-03 31 Center Drive, MSC 2520 **National Institutes of Health** Bethesda, MD 20892-2520 (b)(6)Phone: FAX: (301) 496-4409 (b) (6) E-mail: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The National Institute of Allergy and Infectious Diseases (NIAID) shall not accept liability for any statements made that are the sender's own and not expressly made on behalf of the NIAID by one of its representatives. (b)(6)From: Collins, Francis (NIH/OD) [E] Sent: Tuesday, February 4, 2020 6:12 AM (b)(6)**To:** Jeremy Farrar (b) (6) Cc: Fauci, Anthony (NIH/NIAID) [E] **Subject:** RE: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)Yes, Francis (b)(6)**From:** Jeremy Farrar Sent: Tuesday, February 4, 2020 6:08 AM To: Collins, Francis (NIH/OD) [E] (b) (6) Cc: Fauci, Anthony (NIH/NIAID) [E] **Subject:** Re: Prevalence of infection and stage of the epidemic in Wuhan (b)(4)(b) (6) wrote: On 4 Feb 2020, at 10:58, Collins, Francis (NIH/OD) [E]

Anthony S. Fauci, MD

From: Jeremy Farrar (b) (6)

Sent: Tuesday, February 4, 2020 2:01 AM

To: Fauci, Anthony (NIH/NIAID) [E] (b) (6); Collins, Francis (NIH/OD) [E]

(b) (6)

Subject: FW: Prevalence of infection and stage of the epidemic in Wuhan

Please treat in confidence – a very rough first draft from Eddie and team – they will send on the edited, cleaner version later.

Pushing WHO again today

From: Edward Holmes (b) (6)

Date: Tuesday, 4 February 2020 at 06:33

To: Jeremy Farrar (b) (6)

Subject: Re: Prevalence of infection and stage of the epidemic in Wuhan

Here's our summary so far. Will be edited further.

It's fundamental science and completely neutral as written. Did not mention other anomalies as this will make us look like loons. As it stands it is excellent basic science I think, which is a service in itself.

Will finish as soon as we can.

PROFESSOR EDWARD C. HOLMES FAA FRS

ARC Australian Laureate Fellow

THE UNIVERSITY OF SYDNEY

Marie Bashir Institute for Infectious Diseases & Biosecurity, School of Life & Environmental Sciences and School of Medical Sciences, The University of Sydney | Sydney | NSW | 2006 | Australia

T (b) (6) E (b) (6

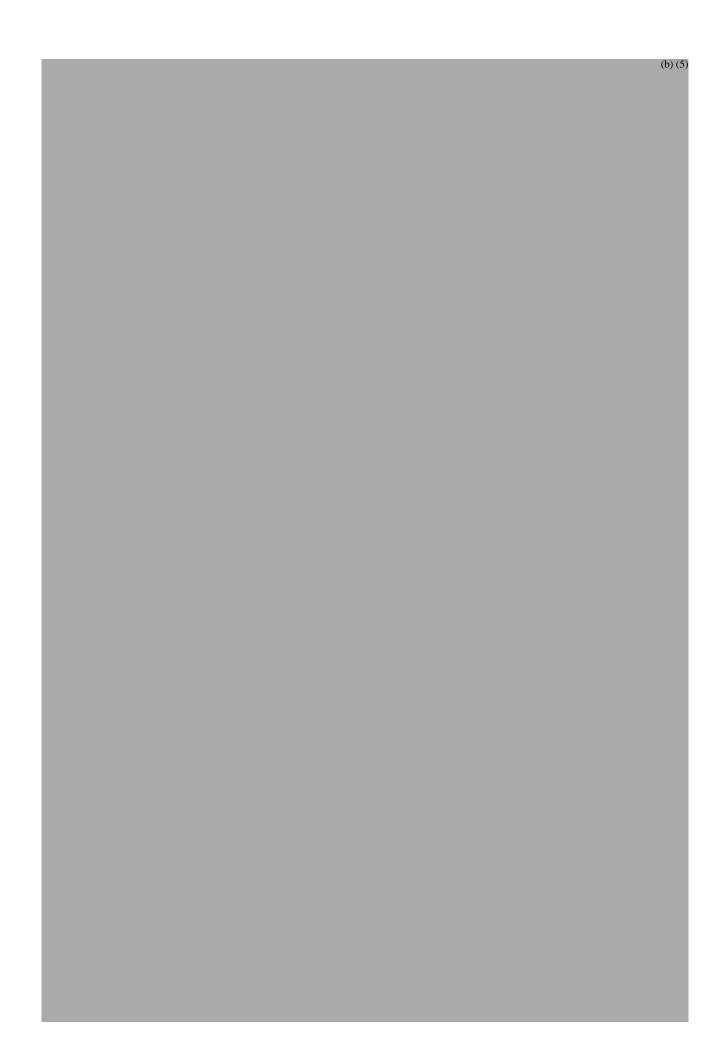
To: Cc: Subject: Date:	Collins, Francis (NIH/OD) [E] Tabak, Lawrence (NIH/OD) [FW: Teleconference Sunday, February 2, 2020 11	[E]
Francis:	<u> </u>	
Do you have	a minute for a quick ca	?
Tony		
From: Jeremy	/ Farrar	(b) (6)
Sent: Sunday	, February 2, 2020 11:28	AM
To: Fauci, Ant	thony (NIH/NIAID) [E] (b) (6)	(b) (6); Collins, Francis (NIH/OD) [E]
Cc: Tabak, La	wrence (NIH/OD) [E]	(b) (6)
Subject: Re: 7	Teleconference	
	aricate, I would appreciator rward.	gone into conclavethey need to decide today in my view. If e a call with you later tonight or tomorrow to think how we
https://www.	zerohedge.com/geopoliti	ical/coronavirus-contains-hiv-insertions-stoking-fears-over-
artificially-cre	eated-bioweapon	
Date: Sunda	i, Anthony (NIH/NIAID) [y, 2 February 2020 at 15	5:30
To: Jeremy F		(b) (6), Francis Collins (b) (6)
	.awrence (NIH/OD) [E]"	(b) (6)
-	Teleconference	
Jeremy:		
	ook so long to weigh in	on your e-mails with Francis and me. I was on conference (b) (5)
calls.		(b) (5) (b) (5)
Best regards	,	
Tony		
-	/ Farrar , February 2, 2020 7:13 A rancis (NIH/OD) [E]	(b) (6) (b) (6)
•	(b) (6)	(b) (6); Tabak, Lawrence (NIH/OD) [E]
<u>-</u>	Teleconference	
Really appr	eciate us thinking throug (b) (5)	th the options (b) (5)
From: Franc	is Collins	(b) (6)

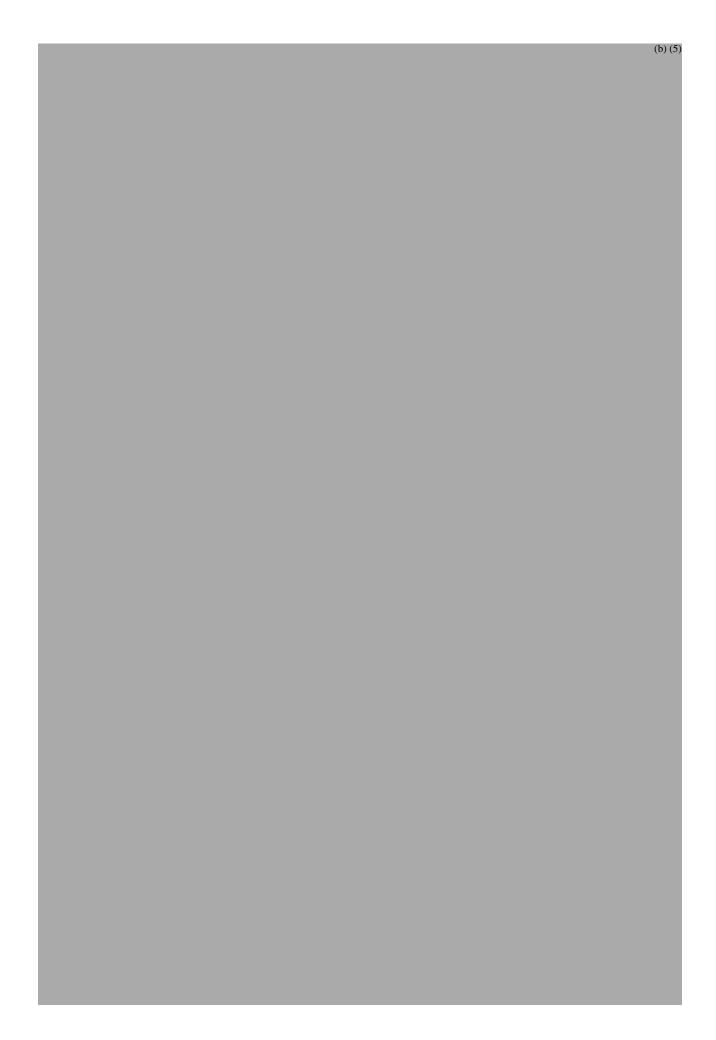
Date: Sunday, 2 February 2020 at 12:03
To: Jeremy Farrar (b) (6)
Cc: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6) (7) (b) (6)
Subject: RE: Teleconference
Hi Jeremy,
Thanks for forwarding these additional reflections from Mike and Bob. (b) (5)
(b) (5)
Francis
From: Jeremy Farrar Sent: Sunday, February 2, 2020 6:53 AM To: Collins, Francis (NIH/OD) [E] Cc: Fauci, Anthony (NIH/NIAID) [E] (b) (6) Subject: Re: Teleconference Thank you
See thoughts overnight from others. (b) (5)
Jaramy
Jeremy (b) (5

From: Francis Collins (b) (6) Date: Sunday, 2 February 2020 at 10:27 To: Jeremy Farrar (b) (6)
Date: Sunday, 2 February 2020 at 10:27
Date: Sunday, 2 February 2020 at 10:27
Date: Sunday, 2 February 2020 at 10:27
Date: Sunday, 2 February 2020 at 10:27
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Date: Sunday, 2 February 2020 at 10:27
Date: Sunday, 2 February 2020 at 10:27
To: Joromy Farrar (b) (6)
To: Jeremy Farrar (b) (6)
Cc: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6) (b) (6)
Subject: RE: Teleconference
Jeremy,
(b) (5)
I'm available any time today except 3:15 – 5:45 pm EST (on a plane) for a call to Tedros. Let
me know if I can help get through his thicket of protectors.
Francis
From: Jeremy Farrar (b) (6)
Sent: Sunday, February 2, 2020 4:48 AM
To: Andrew Rambaut (b) (6)
Cc: R.A.M. Fouchier (b) (6); Fauci, Anthony (NIH/NIAID) [E]
(b) (6); Patrick Vallance (b) (6); Drosten, Christian

(b) (6); Ferguson, Mike (b) (6) Collins, Francis (NIH/OD) [E] (b) (6); Tabak, Lawrence (NIH/OD) [E] (b) (6); Josie Golding Subject: Re: Teleconference This is a very complex issue. I will: (b) (5) I suggest we don't get into a further scientific discussion here, but wait for that group to be established. Jeremy
Mike
Lawrence (NIH/OD) [E] (b) (6) Subject: Re: Teleconference This is a very complex issue. I will: (b) (5) I suggest we don't get into a further scientific discussion here, but wait for that group to be established. Jeremy
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established. Jeremy
From: (b) (6)
Date: Sunday, 2 February 2020 at 09:38
To: Jeremy Farrar (b) (6)
Cc: (b) (6) "Fauci, Anthony (NIH/NIAID) [E]"
(b) (6), Patrick Vallance (b) (6), "Drosten,
, Marion Roopinaris
Edward Hollings
(b) (6), "Kristian G. Andersen" (b) (6), Paul Schreier
(b) (6) Michael FMedSci
(b) (6), Francis Collins (b) (6),
(b) (6) Josie Golding
(b) (6)
Subject: Re: Teleconference
Dear Jeremey, Ron and all, (b) (5)
I hanks for inviting me on the call yesterday.
(b) (c)

Best,	(b) (5)
Andrew	
On 2 Feb 2020, at 08:40, Jeremy Farrar (b) (6) wrote:	
	(b) (5)
Thoughts on that very welcome. On 2 Feb 2020, at 08:30, R.A.M. Fouchier (b) (6) wrot	e:
Dear Jeremy and others, This was a very useful teleconference. (b) (
Thanks for organizing this on such short notice, Kind regards Ron	١.
Ron's notes: (b) (3	9)





Datum: zaterdag 1 f Aan: "Fauci, Anthon			(b) (6)	
Patrick Vallance	, , , , , , , , , , , , ,	(b) (6)	,	
CC: Christian Droste	n	(b)) ⁽⁶⁾ , "M.	
Koopmans"			Л. Fouchier"	
	(b) (6), Edward	Holmes	3) (3)	
	(b) (6)		(b) (6)	
" Kristian G. Anderse"	^{b) (6)} , Andrew Ram		(b) (6)	
Kristian G. Anderse	n	(b)	ıl Schreier	
	, "Ferguson, Mi			
		ncis Collins		
	,	(b) (6)		
	(b) (6), Josie Gold	ding		
	(b) (6)	o .		
Onderwerp: Re: Tele	econference			
Thank you to everyon				
There is clearly much				
helpful to hear some our knowledge.	of our current unde	erstanding and	d the many gaps in	
our knowledge.				

(b)(5)

I hope that is a reasonable approach, please send any thoughts or suggestions.

Once again, thank you for making time over a weekend and for such an informed discussion on a complex issue.

Thank you and best wishes Jeremy

From: Jeremy Farrar		(ł	0) (6)	
Date: Saturday, 1 Febru	ary 2020 at 15	:34		
To: "Fauci, Anthony (NII	H/NIAID) [E]"		(1	⁽⁶⁾ , Patrick
Vallance		(b) (6)		
Cc: "Drosten, Christian"			(b) (6)	Marion
Koopmans		(b) (6)		
				Edward
Holmes				(b) (6)
< <u>a.rambaut@ed.ac.uk</u> >,	, "Kristian G. A	nderser	า"	
(b) (6) >	, Paul Schreier			(b) (6)
			Michael FM	1edSci
	(b) (6)			

Subject: Teleconference

1st February (2nd Feb for Eddie)

Information and discussion is shared in total confidence and not to be shared until agreement on next steps.

Dial in details attached.

Please mute phones.

I will be on email throughout – email Paul or I Paul if any problems If you cannot make it, I will phone you afterwards to update.

One Hour

6am Sydney

8pm CET

7pm GMT

2pm EST

11am PST

(Hope I have the times right!)

Thank you for the series of calls and for agreeing to join this call.

Agenda

- Introduction, focus and desired outcomes JF
- Summary KA
- Comments EH
- Q&A All
- Summary and next steps JF

Kristian Anderson

Bob Garry - I have not been able to contact Bob. Please forward if you

can.

Christian Drosten

Tony Fauci

Mike Ferguson

Ron Fouchier

Eddie Holmes

Marion Koopmans

Stefan Pohlmann

Andrew Rambaut

Paul Schreier

Patrick Vallance

Andrew Rambaut

Institute for Evolutionary Biology

Ashworth Laboratories, University of Edinburgh, Edinburgh, EH9 3FL, UK contact – (b) (6) | http://tree.bio.ed.ac.uk | tel (b) (6

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

.....

From: Fauci, Anthony (NIH/NIAID) [E]
To: Collins, Francis (NIH/OD) [E]

Subject: RE: BioRxiv report on 2019 nCoV from Shi et al.

Date: Saturday, February 1, 2020 11:48:58 AM

Thanks. I did see it, but did not check the similarities. Obviously we need more details.

----Original Message-----

From: Collins, Francis (NIH/OD) [E] (b) (6)

Sent: Saturday, February 1, 2020 11:46 AM

To: Tabak, Lawrence (NIH/OD) [E] (b) (6); Fauci, Anthony (NIH/NIAID) [E]

(b) (6); Wolinetz, Carrie (NIH/OD) [E] (b) (6)

Subject: BioRxiv report on 2019 nCoV from Shi et al.

In case you haven't already seen this preprint from one week ago.

(b) (5)

No evidence this work was supported by NIH.

Francis

To: M.P.G. Koopmans Cc: Jeremy Farrar; Fauci, Anthony (NIH/NIAID) [E]; Patrick Vallance; Christian Drosten; R.A.M. Fouchier; (b) (6); Andrew Rambaut; Kristian G. Andersen; Paul Schreier; (b) (6); Ferguson, MIKE; Collins, Francis (NIH/OD) [E] Subject: Re: Teleconference Date: Saturday, February 1, 2020 3:10:08 PM Hi Marion, (b) (5) Best wishes Eddie PROFESSOR EDWARD C. HOLMES FAA FRS ARC Australian Laureate Fellow THE UNIVERSITY OF SYDNEY Marie Bashir Institute for Infectious Diseases & Biosecurity, School of Life & Environmental Sciences and School of Medical Sciences, The University of Sydney | Sydney | NSW | 2006 | Australia (b) (6) T (b) (6) E (b)(6)On 2 Feb 2020, at 6:43 am, M.P.G. Koopmans wrote: (b)(5)(b)(6)On 1 Feb 2020, at 19:12, Jeremy Farrar wrote: Kristen and Eddie have shared this and will talk through it on the call. Thank you. Hope it will help frame the discussions. (b)(6)From: Jeremy Farrar Date: Saturday, 1 February 2020 at 15:34

From:

Edward Holmes

1st February (2nd Feb for Eddie)

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Tony Fauci

Mike Ferguson

Ron Fouchier

Eddie Holmes

Marion Koopmans

Stefan Pohlmann

Andrew Rambaut

Paul Schreier

Patrick Vallance

<Coronavirus sequence comparison[1].pdf>

From: Fauci, Anthony (NIH/NIAID) [E]

To: <u>Grigsby, Garrett (HHS/OS/OGA)</u>; <u>Harrison, Brian (HHS/IOS)</u>

Cc: Kerr, Lawrence (HHS/OS/OGA); Kadlec, Robert (OS/ASPR/IO); Collins, Francis (NIH/OD) [E]

Subject: follow up

Date: Saturday, February 1, 2020 5:58:33 PM

Folks: (b)(5)The call with Jeremy Farrar (Wellcome Trust (b) (5) (b) (5) Happy to chat with any of you about this. Best regards, Tony (b) (6) **From:** Grigsby, Garrett (HHS/OS/OGA) Sent: Saturday, February 1, 2020 2:29 PM **To:** Harrison, Brian (HHS/IOS) (b)(6)(b) (6); Kerr, Lawrence (HHS/OS/OGA) Cc: Fauci, Anthony (NIH/NIAID) [E] (b)(6)

Brian,

Subject: follow up

Sorry it's been so hard to connect...

Been on many calls w/ Dr F, Stew & Larry, but things have evolved throughout the day – see articles attached from around the world on issue being discussed. It's now very much in the public domain so it would appear to make the imperative of what we were discussing moot because others will certainly get the ball rolling on examination of data.

I know Dr F was speaking with Jeremy of Wellcome Trust this afternoon, so he may have more perspective to add...

Happy to connect on this or anything else at your convenience...

Garrett Grigsby
Director for Global Affairs
Office of the Secretary
U.S. Department of Health & Human Services

(b) (6)

From: Fauci, Anthony (NIH/NIAID) [E]

To: Collins, Francis (NIH/OD) [E]; Tabak, Lawrence (NIH/OD) [E]; Wolinetz, Carrie (NIH/OD) [E]

Subject: RE: More on evolution of coronavirus **Date:** Sunday, February 2, 2020 6:26:16 AM

The Indian paper (b) (5)

From: Collins, Francis (NIH/OD) [E] (b) (6)

Sent: Sunday, February 2, 2020 5:58 AM

To: Fauci, Anthony (NIH/NIAID) [E] (b) (6); Tabak, Lawrence (NIH/OD) [E]

(b) (6); Wolinetz, Carrie (NIH/OD) [E]

Subject: More on evolution of coronavirus

In case you haven't seen, attached is the Indian paper claiming HIV sequences have been inserted into 2019-nCoV, which has been roundly debunked.

I found Jon Cohen's piece in Science to be a pretty useful summary:

https://www.sciencemag.org/news/2020/01/mining-coronavirus-genomes-clues-outbreak-s-origins FC

From: Fauci, Anthony (NIH/NIAID) [E]

To: <u>Daley, George Q.</u>

Cc: Collins, Francis (NIH/OD) [E]; Marston, Hilary (NIH/NIAID) [E]; Graham, Barney (NIH/VRC) [E]

Subject: RE: Inquiry and possible pone call

Date: Sunday, February 2, 2020 10:44:27 AM

George:

Thanks for the note. There is a lot of communications between scientists in China and their colleagues in the USA, many with whom they have been collaborating prior to the outbreak. There is no real "coordination" of this response since we do not know who is doing what until we are told – just like you have done here. Dr. Soumya Swaminathan, Chief Scientist at WHO is organizing a meeting on Feb. 11-12 in Geneva to try and develop a research agenda for nCoV. I am sure that Chinese scientists will be there. It might be helpful to contact her. Her e-mail address is

I hope that this is helpful. I will follow-up with a call.

Best,

Tony

From: Daley, George Q. (b) (6)

Sent: Sunday, February 2, 2020 10:32 AM

To: Fauci, Anthony (NIH/NIAID) [E] (b) (6); Fauci, Anthony (NIH/NIAID) [E]

(b) (6)

Subject: Inquiry and possible pone call

Dear Tony,

Alan Garber, Harvard's Provost, and I met yesterday with a team led by Jack Xia, the CEO of China's Evergrande Company, and Dr Jack Liu, Evergrande's chief health officer, who stated thy were acting on behalf of Dr Zhong Nanshan, China's key point person on the coronavirus outbreak (see below). They wish to engage the Harvard community in a joint research strategy, and they arranged a conference call for tomorrow morning EST with Dr. Zhong.

While I have been mobilizing efforts of our community to react to the virus and to this request, I am not naïve to the challenging politics of such a relationship. I do not want to complicate or duplicate efforts already underway, and am writing to request whatever information you are willing to share on your current efforts to coordinate a response.

If a phone call is more facile, please do not hesitate to try my cell:

anytime today.

Sincerely,

George

George Q. Daley, MD, PhD

Dean, Harvard Medical School

Caroline Shields Walker Professor of Medicine

Professor of Biological Chemistry and Molecular Pharmacology

Office of the Dean, Gordon Hall

25 Shattuck Street, Boston MA 02115

Contact:	(b) (6)	
(b) (6)		
From: Jack Liu	(b) (6)	
Date: Saturday, February 1, 2020 a	at 11:26 PM	
To: Public HMS Email	(b) (6)	
Cc: 谈朝晖	^{(b) (6)} , 陈 敏 Min Chen	
(b) (6)		(b) (6)

Subject: Follow up on today's meeting

Dear Dr. Daley:

Per our discussion this afternoon in the conference room at your school, we have secured researchers who will take part in the planned video conference call next Monday morning. As you suggested that the call would offer an opportunity for researchers from both side to mutually identify projects in the fashion of near term, middle term, and long term according to the nature of the project and the urgency of the outbreak. The following are the chinese research names and their projects respectively. Would you please forward me the same from your side?!

- 1. Zhong, nanshan. Leader of the task force Chinese side.
- 2. Li, yimin. Opt. of diag. and treatment plan for critical patients.
- 3. Zhao, jincun. R & D for 2019-nCov antibody & vaccine.
- 4. Yang, zifeng. Prevention and treatment of 2019-nCov with traditional Chinese Medicine.
- 5. Zhou, rong. Topic on intensive treatment.
- 6. Chen, ling. Topic on drug R & D.
- 7. Dr. He. Al reading and screening of CT, DR image of 2019-nCov pneumonia. Jack Liu, MD

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