Pope, Andrew[APope@nas.edu] To:

Chakravarti, Aravinda[Aravinda.Chakravarti@nyulangone.org]; Kristian Andersen Cc:

Baric, Ralph S[rbaric@email.unc.edu]; Trevor Bedford[trevor@bedford.io]: Peter

Daszak (daszak@ecohealthalliance.org)[daszak@ecohealthalliance.org]; Gigi Gronvall[ggronvall@jhu.edu]; Tom Inglesby (tinglesby@jhu.edu)[tinglesby@jhu.edu]; Shore, Carolyn[CShore@nas.edu]; Chao, Samantha[SChao@nas.edu]

Perlman, Stanley[stanley-perlman@uiowa.edu] From: Sent:

Tue 2/4/2020 11:21:18 AM (UTC-05:00)

Subject: Re: URGENT: Please review by NOON if at all possible...

I would add to one of the sentences that Trevor suggested modifying to state: They also told us that additional genomic sequence data from geographically and temporally diverse viral samples, including samples that have been collected prior to the outbreak in Wuhan, could be used to clarify the origins of the virus and to assess whether virus is evolving to better infect or be transmissible between humans, as occurred during the SARS epidemic.

On another note, as I thought about our discussion last night, I could think of no examples of CoV evolving on passage in cultured cells to encode a furin site at the S1-S2 cleavage site. The cleavage sites are so variable among CoV that there is no need to invoke evolution in cultured cells (as I think we concluded yesterday).

Stanley Perlman, MD, Ph.D.

Professor Depts of Microbiology and Immunology, and Pediatrics BSB 3-712 University of Iowa Iowa City, IA 52242

On Feb 4, 2020, at 9:14 AM, Trevor Bedford < trevor@bedford.io > wrote:

Briefly, my suggestions:

- 1. I wouldn't mention binding sites here. If you start weighing evidence there's a lot to consider for both scenarios.
- 2. I would say "no evidence of genetic engineering" full stop.
- 3. Rather than "including samples that have been collected prior to the outbreak in Wuhan" I would say "including samples collected from as early as possible in the Wuhan outbreak".

I'm not sure what the exact capacity of this group going forward will be, but I might suggest moving to more secure forms of communication.

- Trevor

On Feb 4, 2020, at 6:10 AM, Pope, Andrew <<u>APope@nas.edu</u>> wrote:

Many thanks again for your thoughtful participation yesterday. The plans have changed in terms of our product. Instead of a "Based on Science" web posting, we are now developing a letter that will be signed by the 3 Presidents of our 3 Academies (NAS, Marcia McNutt; NAM, Victor Dzau; NAE, John Anderson), in response to a letter from OSTP. We think this will be more appropriate and expeditious.

Thus, given the urgency of the request from OSTP and HHS we ask that you please review the attached DRAFT CONFIDENTIAL letter, and let us know if you have any concerns or suggested edits. In particular, we would like to ask if there might be some additional detail added to the data needs that are identified. We think it would be helpful to be a bit more specific, but don't want to go into too much detail either. Your help there would be most helpful.

Many sincere thanks again for your continued engagement on this important activity!

Andy

Andrew M. Pope, Ph.D.

Director
Board on Health Sciences Policy
Health and Medicine Division
The National Academies of Sciences,
Engineering, and Medicine
apope@nas.edu
direct
office

Find us at national academies.org/HMD

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