

**To:** 'Chakravarti, Aravinda'[Aravinda.Chakravarti@nyulangone.org]; 'andersen@scripps.edu'[andersen@scripps.edu]; Baric, Ralph S[rbaric@email.unc.edu]; 'trevor@bedford.io'[trevor@bedford.io]; Peter Daszak (daszak@ecohealthalliance.org)[daszak@ecohealthalliance.org]; 'dgriffi6@jhmi.edu'[dgriffi6@jhmi.edu]; Gigi Gronvall[ggronvall@jhu.edu]; 'tinglesby@jhu.edu'[tinglesby@jhu.edu]; Stanley Perlman (stanley-perlman@uiowa.edu)[stanley-perlman@uiowa.edu]; 'KATHRYBR'[KATHRYBR@dni.gov]; Tony Fauci (afauci@niaid.nih.gov)[afauci@niaid.nih.gov]; Hassell, David (Chris) (OS/ASPR/IO)[David.Hassell@hhs.gov]; 'Mex7@cdc.gov'[Mex7@cdc.gov]; 'rllbull@fbi.gov'[rllbull@fbi.gov]; 'Watson, Ian D. EOP/OSTP'[Ian.D.Watson@ostp.eop.gov]; Kadlec, Robert (OS/ASPR/IO)[Robert.Kadlec@hhs.gov]; 'Conrad, Patricia (NIH/NIAID) [E]'[conradpa@niaid.nih.gov]; Barasch, Kimberly (NIH/NIAID) [C][kimberly.barasch@nih.gov]

**Cc:** May, David[DMay@nas.edu]; Chao, Samantha[SChao@nas.edu]; Laney, Kara N.[KLaney@nas.edu]; Shore, Carolyn[CShore@nas.edu]; Shelton Davenport, Marilee[MShelton@nas.edu]; Symmes, Gregory[GSymmes@nas.edu]; Brown, Lisa[LBrown@nas.edu]; Downey, Autumn[ADowney@nas.edu]; Wollek, Scott[SWollek@nas.edu]; Kanarek, Morgan[MKanarek@nas.edu]; Dzau, Victor J.[VDzau@nas.edu]; Beachy, Sarah[SBeachy@nas.edu]; Logan, Kendall[KLogan@nas.edu]; Kearney, Megan[MKearney@nas.edu]; Korsen, Dana[DKorsen@nas.edu]; Behney, Clyde[CBehney@nas.edu]; Shern, Lauren[LShern@nas.edu]; Borel, Bridget[BBorel@nas.edu]

**From:** Pope, Andrew[APope@nas.edu]

**Sent:** Mon 2/3/2020 12:04:47 PM (UTC-05:00)

**Subject:** Today's Call/meeting info  
[Agenda- 2019-nCoV.docx](#)  
[SOW.docx](#)

Thank you for participating in today's meeting of experts at the National Academies to discuss and identify what data, information and samples are needed to understand the evolutionary origins of 2019-nCoV and more effectively respond to the outbreak and resulting misinformation.

Attached for your information are:

- Agenda
- Scope of Work

A list of participants will be sent along shortly

Please let me know if you have any questions of problems with connecting.

"Zoom" Call-in info is as follows (and is included at top of agenda):

**Zoom Dial-in Info:**

Time: Feb 3, 2020 02:00 PM Eastern Time (US and Canada)

Join from PC, Mac, Linux, iOS or Android: <https://nasem.zoom.us>,

Telephone:

Meeting ID:

International numbers available: <https://nasem.zoom.us/>

**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](mailto:apope@nas.edu)

direct

office

Find us at [nationalacademies.org/HMD](http://nationalacademies.org/HMD)

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**Expert Meeting**  
*Rapid Response for Assessment of Data Needs for 2019-nCoV*

## **Agenda**

February 3, 2020  
2:00 p.m.–3:00 p.m. (ET)

Keck Center, Room 103  
500 5th St NW, Washington, DC 20001

Join from PC, Mac, Linux, iOS or Android: <https://nasem.zoom.us/>

Telephone:

Meeting ID:

International numbers available: <https://nasem.zoom.us/>

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**Meeting Objective:** *Assess what data, information and samples are needed to understand the evolutionary origins of 2019-nCoV and more effectively respond to the outbreak and resulting misinformation.*

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2:00 p.m.      **Welcome and Introductions** (5 mins)

ANDREW POPE  
Director, Board on Health Sciences Policy  
National Academies of Sciences, Engineering, and Medicine

2:05 p.m.      **Statement of Work** (10 mins)

KELVIN DROEGEMEIER  
Director  
Office of Science and Technology Policy

D. CHRISTIAN (“CHRIS”) HASSELL  
Senior Science Advisor  
U.S. Department of Health and Human Services

2:15 p.m.      **Perspective from NIH/NIAID** (10 mins)

ANTHONY (“TONY”) S. FAUCI  
Director  
National Institute of Allergy and Infectious Diseases  
National Institutes of Health

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2:25 p.m.      **Discussion of Meeting Objective** (*30 mins*)

2:55 p.m.      **Determine Next Steps** (*5 mins*)

3:00 p.m.      **Adjourn**

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Statement of Work

Rapid Response for Assessment of Data Needs for 2019-nCoV

February 3, 2020

Statement of Task:

In response to a request from OSTP, the NASEM will examine information and identify data requirements that would help determine the origins of 2019-nCoV, specifically from an evolutionary/structural biology standpoint. NASEM will also consider whether this should include more temporally and geographically diverse clinical isolates, sequences, etc. Although a widely-disputed paper posted on a pre-print server last week has since been withdrawn, the response to that paper highlights the need to determine these information needs as quickly as possible. As part of a broader deliberative process, this review will help prepare for future events by establishing a process for quickly assembling subject matter experts for evaluation of other potentially threatening organisms.

Workplan:

NASEM will hold a meeting of experts to assess what data, information and samples are needed to address the unknowns, in order to understand the evolutionary origins of NCoV and more effectively respond to both the outbreak and any resulting misinformation. A statement from the National Academies will be prepared and published on the Web as a “Based on Science” article that summarizes the status and needs for more and what types of data. A more in-depth examination of the issues will be established as a follow up as needed.

**To:** 'Chakravarti, Aravinda'[Aravinda.Chakravarti@nyulangone.org]; Kristian Andersen  
; Baric, Ralph S[rbaric@email.unc.edu]; Trevor Bedford  
(trevor@bedford.io)[trevor@bedford.io]; Peter Daszak (daszak@ecohealthalliance.org)[daszak@ecohealthalliance.org]; Gigi  
Gronvall[ggronvall@jhu.edu]; Tom Inglesby (tinglesby@jhu.edu)[tinglesby@jhu.edu]; Stanley Perlman (stanley-  
perlman@uiowa.edu)[stanley-perlman@uiowa.edu]  
**Cc:** Shore, Carolyn[CShore@nas.edu]; Chao, Samantha[SChao@nas.edu]  
**From:** Pope, Andrew[APope@nas.edu]  
**Sent:** Tue 2/4/2020 9:10:35 AM (UTC-05:00)  
**Subject:** URGENT: Please review by NOON if at all possible...  
[Response Letter\\_DRAFT - Feb 4.docx](#)

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  
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CONFIDENTIAL DRAFT

February 4, 2020

[insert address]

Dear XXX:

Thank you for your letter regarding the current outbreak of a new respiratory virus, the 2019 Novel Coronavirus, or 2019-nCoV, which was first detected in Wuhan, China, and has now been reported in a growing number of locations worldwide, including the United States.<sup>1</sup> The request from OSTP is timely given the public health urgency of the outbreak and potential for misinformation.

In response to your request, we consulted leading experts<sup>2</sup> in the fields of virology, infectious disease genomics, genome sciences, epidemiology, microbiology, immunobiology, coronaviruses, emerging infections, biosecurity, and global health, to share their views of whether available genomic data on 2019-nCoV are consistent with natural evolution and the data that could help determine the origins of 2019-nCoV, specifically from an evolutionary and structural biology standpoint.

Many studies of the genome of 2019-nCoV to better understand its origin and how it relates to viruses found in bats and other species are already underway.<sup>3</sup> The initial views of the experts<sup>4</sup> is that the available genomic data are consistent with natural evolution<sup>5</sup> and that there is currently no evidence that the virus was engineered to spread more quickly among humans. [ask experts to add specifics re binding sites?] 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. Understanding the driving forces behind viral evolution may facilitate the development of more effective strategies for managing the 2019-nCoV outbreak. International collaboration is more important than ever to overcome these types of global challenges.

The National Academies stand ready to assemble a committee of experts to examine these issues in more detail and provide more complete evidence-based advice to you in an expedited manner if requested.

Thank you, again for your commitment to the National Academies and our efforts to provide independent, objective analysis; advise the nation; and inform public policy decisions.

Sincerely,

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<sup>1</sup> “2019 Novel Coronavirus (2019-nCoV) Situation Summary.” *Centers for Disease Control and Prevention*, 3 Feb. 2020. [https://www.cdc.gov/coronavirus/2019-nCoV/summary.html#anchor\\_1580079137454](https://www.cdc.gov/coronavirus/2019-nCoV/summary.html#anchor_1580079137454). Accessed 3 Feb. 2020.

<sup>2</sup> [possible add list]

<sup>3</sup> [insert references]

<sup>5</sup> [possibly add brief explanation that this does not preclude an unintentional release from a laboratory studying the evolution of related coronaviruses]

cc: [insert names]