

## EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF SCIENCE AND TECHNOLOGY POLICY

WASHINGTON, D.C. 20502

February 3, 2020

Dr. Marcia McNutt President, National Academy of Sciences 2101 Constitution Ave, N.W. Washington, D.C., U.S. 20418

SUBJECT: Rapid Response Assessment of 2019-nCoV Data Needs

In support of the Office of Science and Technology's (OSTP) National Science and Technology Committee (NSTC) rapid research response work for the 2019-nCoV response, and the Administration's efforts to characterize and provide evidence-based assessments for outbreak response efforts, I am writing to ask the National Academies of Sciences, Engineering, and Medicine (NASEM) to rapidly examine information and identify data requirements that would help determine the origins of 2019-nCoV, specifically from an evolutionary/structural biology standpoint. I also ask NASEM to consider whether this should include more temporally and geographically diverse clinical isolates, sequences, etc.

Although a widely-disputed paper, "Uncanny similarity of unique inserts in the 2019-nCoV spike protein to HIV-1 gp120 and Hag," posted on the pre-print server bioRxiv last week has been withdrawn, the response to that manuscript highlights the need to determine information and data requirements as quickly as possible to better perform and validate such analyses of origin. These questions are important not only for this current situation, but to inform future outbreak preparation and better understand animal/human and environmental transmission aspects of coronaviruses. As part of a broader deliberative process, this review will aid preparedness for future events by establishing a process that quickly assembles subject matter experts for evaluating other potentially threatening organisms.

OSTP requests NASEM convene a meeting of experts, particularly world class geneticists, coronavirus experts, and evolutionary biologists, to assess what data, information, and samples are needed to address the unknowns, in order to understand the evolutionary origins of 2019-nCoV and more effectively respond to both the outbreak and any resulting misinformation. I request a letter statement from the National Academies be prepared and provided in response to this solicitation. A more in-depth examination of the issues will be established as a follow up as needed.

Sincerely,

Kelvin K. Droegemeier

Director