

Congress of the United States
Washington, DC 20515

May 21, 2020

Kelvin Droegemeier, PhD
Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, DC 20504

Dear Dr. Droegemeier,

Thank you for the work you are doing to provide critical scientific research and analysis for our public health officials as they address the COVID-19 pandemic. We applaud your dedication to evidence-based research that serves as the foundation of our nation's public health response during this time of crisis. We write to request that you leverage your full authority as the Director of the Office of Science and Technology Policy ("OSTP") to direct federal science agencies to collaboratively pursue further research into the seasonality of COVID-19. Improving our understanding of how temperature, humidity, and climate impacts the transmission of COVID-19 will be imperative in saving lives and reducing the economic impact of the virus.

We recognize that research entities such as the National Academies of Science, Engineering, and Medicine ("NASEM") have taken early action in delivering this information by establishing the National Academies' Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats. The committee's recent report, "SARS-CoV-2 Survival in Relation to Temperature and Humidity and Potential for Seasonality," has helped ensure that those making wide-reaching public health decisions are informed with the best possible science.¹ As a COVID-19 vaccine is developed, federal, state and local officials will continue to rely on the most innovative research available to protect public health and mitigate risk.

As the report implies, an accurate understanding of the COVID-19 response to changing temperature and humidity is necessary to maximize preparedness for future outbreaks. For example, seasonality of the virus could limit the size of outbreaks in the summer, providing valuable time to make progress on testing, develop treatments, and provide a critically needed respite for our overburdened healthcare system. However, in the case of a global pandemic, where a virus may be diminishing in one hemisphere, it may then be flourishing elsewhere. Improving our understanding of these dynamics will be critical in managing current and future local, state, and federal responses until a vaccine is developed. In addition to the very acute need for studying seasonality of the virus, it is also important that scientists continue to investigate how COVID-19 and similar, future strains of the coronavirus will be impacted by a changing

¹ <https://www.nap.edu/read/25771/chapter/1#4>

climate. As the report states, “additional studies as the SARS-CoV-2 pandemic unfolds could shed more light on the effects of climate on transmission.”

Unfortunately, the urgency with which these studies are needed does not comply with the time scale required to collect adequate data in determining seasonality of the virus. As the committee’s report states, “studies published so far have conflicting results regarding potential seasonal effects, and are hampered by poor data quality, confounding factors, and insufficient time since the beginning of the pandemic from which to draw conclusions.” We understand there are many limiting factors that simply cannot be controlled as scientists continue to build on our understanding of COVID-19. However, leveraging the research capabilities of the all federal science agencies will allow for improved data quality and a stronger understanding of the many scientific disciplines that will be required to comprehensively study the virus’ relationship with its surrounding environment.

As you know, the *OSTP Fiscal Year 2021 Administration Research and Development Budget Priorities*² identified five research and development priorities to ensure that our nation remains a cutting-edge leader in science and technology. The fourth priority in this list is “American Health and Bioeconomic Innovation,” citing the need for rapid detection and containment of infectious diseases and public health preparedness. Additionally, the report emphasizes the importance of multi-disciplinary science, stating that that “departments and agencies should work together to leverage existing and create new partnerships, share best practices, data, user facilities, and other resources to the extent possible.” The current public health crisis demands this stated collaboration.

Therefore, we implore you to continue building off of the critical work that has been done at NASEM regarding the seasonality and climate response of COVID-19 by issuing a formal directive that all federal science agencies complete further collaborative research on this topic. Our nation’s world-class federal laboratories and research institutions are well positioned to support these efforts.

Again, thank you for your dedication to science and discovery during this pivotal moment in history.

Sincerely,



Joe Neguse
Member of Congress



Kathy Castor
Member of Congress



Mikie Sherrill
Member of Congress

² <https://www.whitehouse.gov/wp-content/uploads/2019/08/FY-21-RD-Budget-Priorities.pdf>

Suzanne Bonamici
Member of Congress

Julia Brownley
Member of Congress

Sean Casten
Member of Congress

Emanuel Cleaver, II
Member of Congress

Steve Cohen
Member of Congress

Jason Crow
Member of Congress

Diana DeGette
Member of Congress

Bill Foster
Member of Congress

Marcia L. Fudge
Member of Congress

Jahana Hayes
Member of Congress

A. Donald McEachin
Member of Congress

Seth Moulton
Member of Congress

Ed Perlmutter
Member of Congress

Jamie Raskin
Member of Congress

Mary Gay Scanlon
Member of Congress

Darren Soto
Member of Congress

Cc:

Marcia McNutt, PhD
President, National Academy of Sciences
John L. Anderson, PhD
President, National Academy of Engineering
Victor J. Dzau, MD
President, National Academy of Medicine