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ADULT CONGENITAL HEART ASSOCIATION	AMERICAN SOCIETY OF HEMATOLOGY	HEALTHYWOMEN	RESTLESS LEGS SYNDROME FOUNDATION
ALLIANCE FOR AGING RESEARCH	AMERICAN SOCIETY OF NEPHROLOGY	HEART FAILURE SOCIETY OF AMERICA	SLEEP RESEARCH SOCIETY
ALPHA-1 FOUNDATION	AMERICAN THORACIC SOCIETY	HEART RHYTHM SOCIETY	SOCIETY FOR CARDIOVASCULAR ANGIOGRAPHY AND INTERVENTIONS
AMERICA'S BLOOD CENTERS	AMERICAN VASCULAR ASSOCIATION FOUNDATION	HEART VALVE VOICE US	SOCIETY FOR CARDIOVASCULAR MAGNETIC RESONANCE
AMERICAN ASSOCIATION FOR RESPIRATORY CARE	ASSOCIATION OF BLACK CARDIOLOGISTS	HEMOPHILIA FEDERATION OF AMERICA	SOCIETY FOR MATERNAL-FETAL MEDICINE
AMERICAN ASSOCIATION FOR THORACIC SURGERY	CHILD NEUROLOGY SOCIETY	HYPERTROPHIC CARDIOMYOPATHY ASSOCIATION	FOUNDATION FOR SARCOIDOSIS RESEARCH
AMERICAN ACADEMY OF SLEEP MEDICINE	CHILDREN'S CARDIOMYOPATHY FOUNDATION	JUVENILE DIABETES RESEARCH FOUNDATION	SOCIETY FOR VASCULAR SURGERY
AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS	CONGRESS OF NEUROLOGICAL SURGEONS	LAM FOUNDATION	SOCIETY FOR WOMEN'S HEALTH RESEARCH
AMERICAN COLLEGE OF CARDIOLOGY	CONQUERING CHD	MARFAN FOUNDATION	SOCIETY OF CARDIOVASCULAR COMPUTED TOMOGRAPHY
AMERICAN DIABETES ASSOCIATION	COOLEY'S ANEMIA FOUNDATION	MENDE HEARTS, INC.	SOCIETY OF INTERVENTIONAL RADIOLOGY
AMERICAN HEART ASSOCIATION	COPD FOUNDATION	MENDED LITTLE HEARTS	U.S. COPD COALITION
AMERICAN LUNG ASSOCIATION	CYSTIC FIBROSIS FOUNDATION	NATIONAL HEMOPHILIA FOUNDATION	WOMEN'S HEART ALLIANCE
AMERICAN RED CROSS	DORNEY-KOPPEL FOUNDATION	PROJECT SLEEP	WOMENHEART
		PEDIATRIC & CONGENITAL INTERVENTIONAL CARDIOVASCULAR SOCIETY	

February 8, 2021

Chair
Subcommittee on Labor-HHS-ED
U.S. Senate
Washington, DC 20510

Rosa DeLauro
Chair
Subcommittee on Labor-HHS-ED
U.S. House of Representatives
Washington, DC 20515

Ranking Member
Subcommittee on Labor-HHS-ED
U.S. Senate
Washington, DC 20510

Tom Cole
Ranking Member
Subcommittee on Labor-HHS-ED
U.S. House of Representatives
Washington, DC 20515

Dear Honorable Chairs and Ranking Members:

The COVID-19 pandemic persists as a global public health crisis that requires the continued mobilization of scientific research resources to enable us to improve our understanding of the SARS-CoV2 virus, develop new interventions to mitigate life-threatening cardiovascular, respiratory, circadian, and hematological complications of the disease, including long-term complications, and develop new diagnostics and therapeutics, including for high-risk populations. The 57 member organizations of the NHLBI Constituency Group respectfully request that Congress include \$400 million for the NIH's National Heart, Lung, and Blood Institute (NHLBI) in the next COVID-19 emergency supplemental legislation.

As the COVID-19 pandemic has evolved, individuals with cardiovascular and respiratory diseases remain at greater risk of life-threatening complications and a substantially higher risk of death from COVID-19. Acute Respiratory Distress Syndrome (ARDS) and sepsis are the primary causes of death in people with COVID-19. Hospitalized coronavirus patients with

preexisting cardiovascular disease experience ten times higher death rates.¹ Just as alarming, blood clots caused by the coronavirus may lead to major strokes, even in young people. Other recent studies indicate that critically ill COVID-19 patients with COPD had a 63% risk of severe disease and a 60% higher death rate.² Additionally, COVID-19 associated coagulopathy has been recognized in a subset of critically ill patients with fibrinogen and D-dimer elevations detected as the most common feature. While the implications of this coagulopathy are still being realized, further study into the biology of the disease and treatment options including anticoagulation therapy is needed.³

African Americans and other racial and ethnic minorities continue to become infected and die from COVID at alarmingly high rates. As COVID-19 vaccines are being rolled out across the U.S., we are unfortunately seeing high levels of mistrust and disinformation about vaccines among some minority communities. The NHLBI has partnered with the National Institute on Minority Health and Health Disparities (NIMHD) on the Community Engagement Alliance (CEAL) program, which is educating minority communities across eleven states about effective disease prevention practices and working to improve confidence and uptake of COVID vaccines and treatments. Additional funding for NHLBI would support the expansion of this program to more states and epidemiological studies to address the disproportionate impact the coronavirus is having on these populations. NHLBI continues to address COVID-related complications in other vulnerable populations. The institute is collaborating with the National Institute on Child Health and Development (NICHD) to respond to pediatric multi-system inflammatory syndrome (PMIS). The NHLBI also funds research on sex- and gender-based differences in relation to COVID-19, of particular importance considering the evidence pointing to gender disparities in morbidity and long-term symptom prevalence.

The NHLBI's multi-pronged research strategy on COVID focuses on (1) studies of COVID-19 patients over time ("longitudinal studies") to better understand the course of the disease, as well as (2) testing therapies intended to modify the response of the individual to SARS-CoV-2 infection ("host-directed therapeutics"), with the aim of protecting and shielding host tissues from virus-induced injury and downstream effects on heart, lung, blood, and vascular tissues. Examples of these studies include the following:

- The Clinical Trial of COVID-19 Convalescent Plasma of Outpatients (C3PO) is evaluating the use of convalescent blood plasma to treat non-hospitalized patients with mild COVID-19.
- The Colchicine Coronavirus SARS-CoV-2 (COLCORONA) trial studied the gout drug colchicine to determine whether it can limit inflammation in the heart and lungs in patients with COVID-19.

¹ How does cardiovascular disease increase the risk of severe illness and death from COVID-19? Dara K. Lee Lewis, MD Harvard Medical School, April 2, 2020 <https://www.health.harvard.edu/blog/how-does-cardiovascular-disease-increase-the-risk-of-severe-illness-and-death-from-covid-19-2020040219401>

² Jaber S. Alqahtani, Tope Oyelade, Abdulelah M. Aldhahir, et. al. Prevalence, Severity and Mortality associated with COPD and Smoking in patients with COVID-19: A Rapid Systematic Review and Meta-Analysis. *PLOS ONE*, 2020; 15 (5): e0233147 DOI: [10.1371/journal.pone.0233147](https://doi.org/10.1371/journal.pone.0233147)

³ Tang N, Li D, Wang X, Sun Z. Abnormal coagulation parameters are associated with poor prognosis in patients with novel coronavirus pneumonia. *J Thromb Haemost* 2020; 18: 844–47.

- The COVID-19 Observational Study (CORAL) is studying the pathobiology and outcomes among over 3,000 adults hospitalized with COVID-19 for up to six months after hospital discharge.
- The Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV)-4 trials include three trials evaluating whether anticoagulants or antiplatelet drugs can reduce life-threatening blood clots in patients with various stages of COVID-19.

Supplemental funding of \$400 million would allow the NHLBI to sustain and expand its investment in vital clinical, basic, longitudinal, and translational research across heart, lung, blood and sleep to address critical needs related to the evolving COVID-19 pandemic, including chronic long-term conditions such as myocarditis and pulmonary fibrosis. These studies will contribute invaluable knowledge regarding the protection of our most vulnerable populations and ensure our preparedness for future pandemics. The requested funding, in addition to a strong regular Fiscal Year 2022 appropriation, will help the NHLBI address pressing COVID-19 research needs while maintaining progress on other national cardiovascular, respiratory, sleep and blood-related research priorities.

Please contact Nuala S. Moore with the American Thoracic Society at Nmoore@thoracic.org or John Laughner with the American Heart Association at John.Laughner@heart.org if you have questions or need more information. Thank you for your consideration.

Sincerely,



John Laughner
Co-chair
NHLBI Constituency Group



Nuala S. Moore
Co-chair
NHLBI Constituency Group