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September 4, 2024

The Honorable Bernie Sanders  
Chair  
Senate Committee on Health, Education, Labor, and Pensions  
428 Dirksen Senate Office Building  
Washington, D.C. 20510

Dear Chair Sanders:

[The American Association of Immunologists \(AAI\)](#),\* the nation's largest organization of immunologists and scientists in related disciplines, is pleased to offer its support for your recently introduced legislation, the Long COVID Research Moonshot Act (S. 4964). As you know, the need for research on this condition is urgent. In some instances, people are unable to work, attend school, or perform basic daily functions. In 2022, an [estimated 8.9 million adults and 362,000 children](#) in the U.S. reported Long COVID symptoms. This is likely an underestimate given the challenges of accurately quantifying the impact of Long COVID, including underreporting and a lack of validated biomarkers. There are currently no curative treatments or diagnostics that can definitively diagnose patients experiencing Long COVID symptoms, which range from mild to debilitating.

AAI believes that it is vital for any Long COVID Research Program to support studies that span the research spectrum, including understanding the fundamental immunological mechanisms of the condition. Foundational and translational research are necessary to understand Long COVID and inform the development and evaluation of new therapies. Therefore, we appreciate that the first Program activity described in the legislation emphasizes foundational research with its aim to "investigate the etiology, pathophysiology, risk factors, and pathology of Long COVID in adults and children."

AAI would also like to highlight a conclusion from a recent [Consensus Study Report](#) by the National Academies of Sciences, Engineering, and Medicine (NASEM) in June 2024: *"Complex, infection-associated chronic conditions affecting multiple body systems are not new, and Long COVID shares many features with such conditions as myalgic encephalomyelitis/chronic fatigue syndrome, fibromyalgia, and postural orthostatic tachycardia syndrome. Current theories about the pathophysiology of these conditions include immune dysregulation, neurological disturbances, cardiovascular damage, gastrointestinal dysfunction, metabolic issues, and mitochondrial dysfunction. More research is needed to understand the natural history and management of complex multisystem chronic conditions, including Long COVID."*

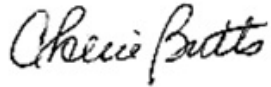
As NASEM makes clear, Long COVID is not the first post-acute infection syndrome and will likely not be the last. AAI believes it is crucial for this



Research Program to consider other post-acute infections and appreciates that your bill includes language instructing the Research Program to “conduct comparative research to understand the similarities and differences between Long COVID and other infection-associated chronic conditions with similar phenotypes.”

AAI thanks you again for introducing this important legislation and would be delighted to be of assistance on scientific issues that may arise. Please feel free to contact AAI Director of Government Affairs Jake Schumacher ([jschumacher@aai.org](mailto:jschumacher@aai.org)) or me if there is additional information AAI can provide on this or any other topic.

Sincerely,



Cherié Butts, Ph.D.  
Chair, AAI Committee on Public Affairs

*\* AAI's mission is to improve global health and well-being by advancing immunology and elevating public understanding about the immune system. AAI members, many of whom are funded by the NIH, are responsible for some of the most significant biomedical discoveries of the past century. These include understanding the transmission of infectious diseases, like COVID-19, and developing effective methods (such as vaccines) to prevent and treat them; discovering new defenses against re-emerging and drug-resistant bacterial infections; expanding our understanding of the immunological basis of cancer and developing immunotherapies; regulating debilitating autoimmune diseases; and developing treatments to prevent the rejection of transplanted organs and bone marrow.*

cc: Senator Tammy Duckworth  
Senator Tim Kaine  
Senator Edward Markey  
Senator Tina Smith  
Senator Peter Welch

