

13 May 2021

The Honorable Patty Murray  
Defense Appropriations Subcommittee  
U.S. Senate  
Washington, D.C. 20510

Dear Senator Murray:

On behalf of a coalition of concerned Washington State-based stakeholders, I am writing to you to request your support of continued federal research for new synthetic vascular graft technology. I joined this auspicious group of concerned entities and felt that I could lend assistance in my role as CEO of a small Seattle medical device company, Healionics.

Scientists have been trying for decades to develop better ways to repair or replace blood vessels damaged by disease or trauma, and to create safer vascular access for dialysis patients, without inducing clotting or infection. This issue is highly important both to our warfighters who may incur battlefield trauma, as well as to our US civilians and veterans who live with kidney, vascular or heart diseases that require safe vascular access or replacement.

With the support of the U.S. Congress, the Department of Defense and the National Institute of Health, new technology has been developed to produce safer, more reliable synthetic replacement blood vessels (known as “vascular grafts”) that can address this pressing need. With this innovation, a synthetic blood vessel can be engineered to look, feel, and function much like a human blood vessel, particularly in its capacity to bio-integrate with and be accepted by the body. It can have an extended shelf life and not need refrigeration -- the first-ever bio-integrating vessel with such capabilities. And most importantly, it is expected to offer longer term viability and reduced risk of infection, relative to existing synthetic blood vessels.

This technology has the potential to greatly improve the health and longevity of patients with kidney failure, and save soldiers’ lives on the battlefield by revascularizing limbs that have suffered traumatic injury. Vascular grafts are also routinely used in surgeries to bypass failing peripheral and coronary arteries. But currently-available grafts have had only limited success in these situations, due to their tendency to clot or become infected. Meanwhile, demand for a safer, more reliable synthetic blood vessel continues to grow, due to increasing rates of kidney, vascular and heart disease, and general aging of the population.

Collectively, we respectfully ask for your kind support of the attached report language (*see “Addendum 1”*) for the Congressionally Directed Combat Readiness Medical Research Program (CDCRMRP) in the FY 2022 Defense Appropriations legislation. I have also enclosed a copy of the letter that Representative DelBene was kind enough to submit to the House Defense Appropriations Subcommittee with this report language request, (*see “Addendum 2”*). Thank you.

Respectfully,

American Association of Kidney Patients  
The Kidney Research Institute  
The Center for Dialysis Innovation  
Keiretsu Forum Northwest

Mike Connolly, CEO, Healionics

## Addendum 1

We believe this technology can best be advanced via continued support from the Department of Defense Combat Readiness Medical Research Program. As such, we are requesting the following report language for the Defense Appropriation Bill for this Program:

*“The Committee is interested in advancing synthetic vascular graft technology. To better understand this opportunity the Committee directs the Assistant Secretary of Defense (Health Affairs) in coordination with the Secretary of the Department of Veterans Affairs, to submit a report to the House and Senate Appropriations committees not later than 90 days after the enactment of this Act on the incidence of and costs to each Department to treat servicemembers and veterans with vascular trauma and an assessment of how advancement in synthetic vascular graft technology can improve readiness and reduce costs.”*