

United States Senate  
WASHINGTON, DC 20510

April 3, 2020

The Honorable Richard Shelby  
Chairman  
Appropriations Subcommittee on Defense  
113 Dirksen  
United States Senate  
Washington, DC 20510

The Honorable Richard J. Durbin  
Vice Chairman  
Appropriations Subcommittee on Defense  
711 Hart  
United States Senate  
Washington, DC 20510

Dear Chairman Shelby and Vice Chariman Durbin:

As your Subcommittee begins work on the Fiscal Year 2021 (FY21) Defense Appropriations bill, we respectfully request adequate funding for the Gulf War Illness Research Program (GWIRP) within the Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP). We also thank you for providing the program \$22 million in FY 2020.

By congressional design, the GWIRP is a unique medical research program narrowly focused on improving the health and lives of Veterans with Gulf War Illness. Reports by the National Academy of Sciences (NAS) and government committees have shown that: 1) Gulf War Illness (“GWI”), likely caused by toxic exposures, affects up to one-third of the nearly 700,000 veterans who served in the 1991 Gulf War; and 2) GWI’s debilitating symptoms typically include “some combination of widespread pain, headache, persistent problems with memory and thinking, fatigue, breathing problems, stomach and intestinal symptoms, and skin abnormalities.”<sup>1</sup>

The GWIRP is narrowly focused on unraveling GWI’s underlying pathobiology, improving its definition and diagnosis, and developing treatments. While two-thirds of GWIRP-funded studies are still in progress, the growing body of results published in peer-reviewed scientific journals demonstrates steady advances toward the GWIRP’s goals. GWIRP-funded pilot studies shown as promising are now progressing to larger-scale clinical trials. These successes are the direct result of clear, treatment-focused congressional direction, stable appropriations, and effective management. Key recent GWIRP-funded results include:

- The **first direct evidence of neuroinflammation** in veterans with GWI,<sup>2</sup> a treatable target.
- **Significantly different gut microbiome patterns** in GWI, including greater plasma levels of an inflammatory cytokine and associated with significantly more reported GW chemical weapons exposure and GWI symptoms.<sup>3</sup>

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<sup>1</sup> National Academy of Sciences, Institute of Medicine, “*Gulf War and Health, Volume 8: Update of Health Effects of Serving in the Gulf War*,” 2010; Research Advisory Committee on Gulf War Veterans' Illnesses, U.S. Department of Veterans Affairs, “*Gulf War Illness and the Health of Gulf War Veterans: Research Update and Recommendations, 2009-2013*,” 2014.

<sup>2</sup> Zeynab A, Albrecht DS, Bergan C, Akeju O, Clauw DJ, Conby L, Edwards RR, Kim M, Lee YC, Protsenko E, Napadow V, Sullivan K, Loggia ML. (February 2020). **In-vivo imaging of neuroinflammation in veterans with Gulf War illness.** *Brain, Behavior, and Immunity.* <https://doi.org/10.1016/j.bbi.2020.01.020>

<sup>3</sup> Janulewicz, Patricia A.; Seth, Ratanesh K.; Carlson, Jeffrey M.; Ajama, Joy; Quinn, Emily; Heeren, Timothy; Klimas, Nancy; Lasley, Steven M.; Horner, Ronnie D.; Sullivan, Kimberly; Chatterjee, Saurabh. (2019). “**The Gut-Microbiome in Gulf War**

- A 25 percent reduction in key GWI symptoms by treating GWI with KPAX002, a proprietary combination designed to support mitochondrial function.<sup>4</sup>


Recognizing the GWIRP's progress, the recommendations in the last Research Advisory Committee report remain instructive: "Congress should maintain its funding to support the effective treatment-oriented [GWIRP]."<sup>5</sup> The discoveries through the GWIRP continue to represent encouraging steps toward achieving the treatment goals articulated by the NAS: "to speed the development of effective treatments, cures, and, it is hoped, preventions" for current and future U.S. forces at risk of similar exposures and outcomes. Indeed, the GWIRP has served as a model of how to conduct treatment-oriented research to address a challenging illness and is succeeding where earlier programs failed. Its two-tier peer-reviewed and highly competitive process ensures the independence and value of the results produced. Unlike the VA's research program, which only funds VA researchers, the GWIRP seeks out and funds the best research by any combination of government, academic, or private-sector researchers and research teams.

We respectfully request that you provide the necessary resources in the FY21 Defense Appropriations bill to support this vital and effective program as it progresses into more advanced, larger-scale clinical trials – a development indicative of the GWIRP's steady progress, but one that comes with well-justified, added costs. Furthermore, it remains critical to the program's success and accountability that the GWIRP is retained as a stand-alone program within the CDMRP and not be combined as a topic area within broader, less-targeted research programs.

Thank you for your consideration of our request, which is supported by the Veterans for Common Sense, Blinded Veterans Association (BVA), Jewish War Veterans of the USA, Military Order of the Purple Heart, Non Commissioned Officers Association, the Quinism Foundation, TREA: The Enlisted Association, Veterans and Military Families for Progress, Fleet Reserve Association, Association of the United States Navy, Sgt. Sullivan Circle.

Sincerely,

  
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Tammy Baldwin  
United States Senator

  
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Jon Tester  
United States Senator

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Veterans: A Preliminary Report." *Int. J. Environ. Res. Public Health* 16, no. 19: 3751. <http://doi.org/10.3390/ijerph16193751>.

See also: "[GWIRP-funded project expands exciting gut biome finding for Gulf War Illness](#)"

<sup>4</sup> Holodniy M, Kaiser JD. (November 2019). **Treatment for Gulf War Illness (GWI) with KPAX002** (methylphenidate hydrochloride + GWI nutrient formula) in subjects meeting the Kansas case definition: A prospective, open-label trial. *J. of Psych. Rsch.*, 118: 14-20. <https://doi.org/10.1016/j.jpsychires.2019.08.003> . See also: "[A Prospective Open-Label Clinical Trial of Methylphenidate plus a GWI-Specific Nutrient Formula in Patients with Gulf War Illness and Concentration Disturbances](#)".

<sup>5</sup> Research Advisory Committee on Gulf War Veterans' Illnesses, U.S. Department of Veterans Affairs, "[Gulf War Illness and the Health of Gulf War Veterans: Research Update and Recommendations, 2009-2013](#)," 2014.





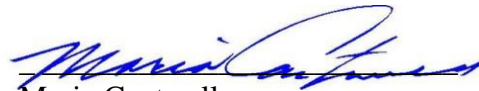
Kamala D. Harris  
United States Senator



Debbie Stabenow  
United States Senator



Kirsten Gillibrand  
United States Senator



Maria Cantwell  
United States Senator



Dianne Feinstein  
United States Senator



Kyrsten Sinema  
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