

Congress of the United States  
Washington, DC 20515

April 27, 2021

The Honorable Betty McCollum  
Chair  
Subcommittee on Defense  
House Committee on Appropriations  
H-405, The Capitol  
Washington, DC 20515

The Honorable Ken Calvert  
Ranking Member  
Subcommittee on Defense  
House Committee on Appropriations  
1036 Longworth House Office Building  
Washington, DC 20515

Dear Chair McCollum and Ranking Member Calvert,

As your Subcommittee begins work on the Fiscal Year 2022 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 thank you for providing the program \$22 million in FY 2021.

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 (GWI). Reports by the National Academy of Sciences (NAS) and government committees have shown that GWI typically includes "some combination of widespread pain, headache, persistent problems with memory and thinking, fatigue, breathing problems, stomach and intestinal symptoms, and skin abnormalities," that it affects up to one-third of the nearly 700,000 Veterans who served in the 1990-91 Gulf War, and that it was likely caused by Gulf War toxic exposures.<sup>1</sup> Recent GWIRP-funded research has provided further evidence that GWI remains a serious, debilitating, and unrelenting health issue, having worsened over time among these veterans, including female Gulf War veterans.<sup>2,3</sup>

The treatment-focused GWIRP funds research to unravel GWI's underlying pathobiology, improve its definition and diagnosis, and develop treatments. The growing body of GWIRP-funded results published in peer-reviewed scientific journals demonstrates encouraging progress. Despite the challenges of the COVID-19 pandemic, a first-ever *Gulf War Illness State of the Science Conference* was held entirely online last August with 67 presentations of GWIRP-funded GWI research, 42 presentations on GWI and other health issues by VA, a Gulf War veteran panel, and hundreds of researcher and Veteran attendees.<sup>4</sup> Promising pilot studies funded by the GWIRP are now progressing to larger-scale clinical trials, including by the GWIRP-funded Gulf War Illness Clinical Trials and Interventions Consortium (GWICTIC). This positive progress is the direct result of clear, treatment-focused congressional direction, stable appropriations, and effective management. Some recent results funded by the GWIRP include:

- The persistence of GWI symptoms may be explained in part by elevated intracellular calcium levels in brain cells (neurons), found in a rat model of Gulf War toxic exposures; analysis showed promising new treatment targets for GWI-related neurological problems.<sup>5</sup>

---

<sup>1</sup> National Academy of Sciences, "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> Yee MK et al, "Longitudinal Assessment of Health Symptoms in Relation to Neurotoxicant Exposures in 1991 Gulf War Veterans: The Ft. Devens Cohort," *J Occup Environ Med*, 2020 Sep;62(9):663-668: <https://doi.org/10.1097/JOM.0000000000001910>

<sup>3</sup> Sullivan K, et al, "Prevalence and Patterns of Symptoms Among Female Veterans of the 1991 Gulf War Era: 25 Years Later," *J Womens Health (Larchmt)*, 2020 Jun;29(6):819-826: <https://doi.org/10.1089/jwh.2019.7705>

<sup>4</sup> CDMRP, "Joint VA/DoD Gulf War Illness State of the Science Conference Draws Hundreds of Researchers and Veterans: Online Event Coincides with 30-Year Anniversary of Operation Desert Shield," 2020: [https://cdmrp.army.mil/gwirp/research\\_highlights/20Goldman\\_highlight](https://cdmrp.army.mil/gwirp/research_highlights/20Goldman_highlight)

<sup>5</sup> Phillips KF, et al, "Calcium Hypothesis of Gulf War Illness: Role of Calcium Ions in Neurological Morbidities in a DFP-Based Rat Model for Gulf War Illness," *Neurosci Insights*, 2020; 15: 2633105520979841: <https://doi.org/10.1177/2633105520979841>

- Prior GWIRP-funded research found evidence of increased autoantibodies of central nervous system proteins in GWI; that earlier finding was confirmed and validated in a much larger sample, providing evidence to support a blood test as an objective measurement of GWI.<sup>6</sup>
- Some GWI symptoms appear to be reduced by new treatments tested in successfully completed high-risk/high-reward pilot studies funded by the GWIRP.<sup>7,8</sup>

The discoveries through the GWIRP continue to represent encouraging steps toward achieving the goals articulated by the NAS “to speed the development of effective treatments, cures, and, it is hoped, preventions,” which are also important for current and future U.S. forces at risk of similar exposures and outcomes. Indeed, the GWIRP is a model of how to conduct treatment-oriented research to address complex toxic exposure health outcomes and is succeeding where earlier programs failed. Its two-tier peer-reviewed and highly competitive research funding process ensures the independence and value of the results produced. Unlike the VA’s intramural research program, which only funds VA researchers, the GWIRP seeks out and funds research led by any combination of government, academic, or private-sector researchers and research teams.

We respectfully request you provide the necessary resources in the FY 2022 Defense Appropriations Bill to continue this vital and effective program and to support its progress into more advanced, larger-scale clinical trials. It remains critical to the program's success and accountability that the GWIRP is retained as a stand-alone program within the CDMRP and is not combined within broader, less-targeted programs with multiple topic areas.

Thank you for your consideration of our request, which is supported by DAV, Veterans of Foreign Wars, Blinded Veterans Association, Burn Pits 360, California Communities Against Toxics, Cease Fire Campaign, Fleet Reserve Association, Iraq and Afghanistan Veterans of America, Jewish War Veterans of the USA, Military Order of the Purple Heart, Military-Veterans Advocacy, National Veterans Legal Services Program, National Vietnam & Gulf War Veterans Coalition, Paralyzed Veterans of America, the Quinism Foundation, Reserve Organization of America (ROA), Sergeant Sullivan Circle, Service Women's Action Network (SWAN), Tragedy Assistance Program for Survivors (TAPS), United Soldiers and Sailors of America, Veterans for Common Sense, Veterans and Military Families for Progress, Veteran Warriors, VetsFirst, and Vietnam Veterans of America.

Sincerely,



GREGORIO KILILI CAMACHO SABLAN  
Member of Congress



JACK BERGMAN  
Member of Congress

---

<sup>6</sup> Abou-Donia M et al, “Using Plasma Autoantibodies of Central Nervous System Proteins to Distinguish Veterans with Gulf War Illness from Healthy and Symptomatic Controls,” *Brain Sciences*, 2020, 10(9), 610: <https://doi.org/10.3390/brainsci10090610>

<sup>7</sup> Donovan E, et al, “A Placebo-Controlled, Pseudo-Randomized, Crossover Trial of Botanical Agents for Gulf War Illness: Curcumin (*Curcuma longa*)...and French Maritime Pine Bark (*Pinus pinaster*),” *Int. J. of Environ. Rsch & Public Health*, 2021 Mar; 18(5): 2468: <https://doi.org/10.3390/ijerph18052468>

<sup>8</sup> Holton KF, et al, “The low glutamate diet effectively improves pain and other symptoms of Gulf War Illness,” *Nutrients*, 2020 Aug 26;12(9):2593: <https://doi.org/10.3390/nu12092593>

/S/  
MARK TAKANO  
Member of Congress

/S/  
MIKE BOST  
Member of Congress

/S/  
GWEN MOORE  
Member of Congress

/S/  
PETER A. DEFAZIO  
Member of Congress

/S/  
STACEY E. PLASKETT  
Member of Congress

/S/  
STEPHEN F. LYNCH  
Member of Congress

/S/  
RICHARD E. NEAL  
Member of Congress

/S/  
DANNY K. DAVIS  
Member of Congress

/S/  
GREGORY W. MEEKS  
Member of Congress

/S/  
MARC VEASEY  
Member of Congress

/S/  
RON KIND  
Member of Congress

/S/  
CHERI BUSTOS  
Member of Congress

/S/  
TONY CÁRDENAS  
Member of Congress

/S/  
MARK DESAULNIER  
Member of Congress

/S/  
JENNIFFER GONZÁLEZ-COLÓN  
Member of Congress

/S/  
WILLIAM R. KEATING  
Member of Congress

/S/  
JAMES P. MCGOVERN  
Member of Congress

/S/  
LINDA T. SANCHEZ  
Member of Congress

/S/  
DONALD M. PAYNE, JR.  
Member of Congress

/S/  
RICK LARSEN  
Member of Congress

/S/  
ELEANOR HOLMES NORTON  
Member of Congress

/S/  
JAMIE RASKIN  
Member of Congress

/S/  
LLOYD DOGGETT  
Member of Congress

/S/  
JAHANA HAYES  
Member of Congress

/S/  
BOBBY L. RUSH  
Member of Congress

/S/  
JIMMY PANETTA  
Member of Congress

/S/  
AUMUA AMATA C. RADEWAGEN  
Member of Congress

/S/  
CHRIS PAPPAS  
Member of Congress

/S/  
ANTONIO DELGADO  
Member of Congress

/S/  
RAÚL M. GRIJALVA  
Member of Congress

/S/  
JAN SCHAKOWSKY  
Member of Congress

/S/  
BARBARA LEE  
Member of Congress

/S/  
JULIA BROWNLEY  
Member of Congress

/S/  
CHELLIE PINGREE  
Member of Congress

/S/  
TRENT KELLY  
Member of Congress

/S/  
ANGIE CRAIG  
Member of Congress

/S/  
KATHLEEN M. RICE  
Member of Congress

/S/  
JUDY CHU  
Member of Congress

/S/  
JESÚS G. "CHUY" GARCÍA  
Member of Congress

/S/  
JOHN YARMUTH  
Member of Congress

/S/  
MIKIE SHERRILL  
Member of Congress

/S/  
ALAN LOWENTHAL  
Member of Congress

/S/  
JACKIE SPEIER  
Member of Congress

/S/  
ANDRÉ CARSON  
Member of Congress

/S/  
DEBBIE DINGELL  
Member of Congress

/S/  
ANNA G. ESHOO  
Member of Congress

/S/  
GREG PENCE  
Member of Congress

/S/  
JIM COSTA  
Member of Congress

/S/  
COLIN ALLRED  
Member of Congress

/S/  
ILHAN OMAR  
Member of Congress

/S/  
SEAN CASTEN  
Member of Congress

/S/  
RO KHANNA  
Member of Congress

/S/  
GUS M. BILIRAKIS  
Member of Congress

/S/  
PETER WELCH  
Member of Congress

/S/  
ELISSA SLOTKIN  
Member of Congress

/S/  
RASHIDA TLAIB  
Member of Congress

/S/  
BILL JOHNSON  
Member of Congress

/S/  
ALBIO SIRES  
Member of Congress

/S/  
RAUL RUIZ, M.D.  
Member of Congress

/S/  
DIANA DEGETTE  
Member of Congress

/S/  
DARREN SOTO  
Member of Congress

/S/  
THOMAS R. SUOZZI  
Member of Congress

/S/  
RUBEN GALLEGO  
Member of Congress

/S/  
MADELEINE DEAN  
Member of Congress

/S/  
JOHN KATKO  
Member of Congress

/S/  
LISA BLUNT ROCHESTER  
Member of Congress

/S/  
VERN BUCHANAN  
Member of Congress

/S/  
ANN MCLANE KUSTER  
Member of Congress

/S/  
ANTHONY G. BROWN  
Member of Congress

/S/  
VERONICA ESCOBAR  
Member of Congress

/S/  
PAUL A. GOSAR, D.D.S.  
Member of Congress

/S/  
PRAMILA JAYAPAL  
Member of Congress

/S/  
RAJA KRISHNAMOORTHY  
Member of Congress

/S/  
SHEILA JACKSON LEE  
Member of Congress

/S/  
EDDIE BERNICE JOHNSON  
Member of Congress

/S/  
CHRISTOPHER H. SMITH  
Member of Congress

/S/  
CATHY MCMORRIS RODGERS  
Member of Congress

/S/  
JASON CROW  
Member of Congress