

Congress of the United States

Washington, DC 20515

March 17, 2020

The Honorable Pete Visclosky
Chairman
Subcommittee on Defense
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

The Honorable Ken Calvert
Ranking Member
Subcommittee on Defense
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Visclosky and Ranking Member Calvert,

We write to respectfully request that the fiscal year (FY) 2021 Department of Defense Appropriations bill include funding levels as outlined below for key U.S. Department of Defense (DoD) basic research program elements. The requests in this letter are consistent with the recommendations from the Commission on the National Defense Strategy for the United States.

<u>Agency/Account</u>	<u>PE Number</u>	<u>Program Element</u>	<u>FY 21 Request*</u>
Army RDT&E	0601102A	Defense Research Sciences	\$375,749
Army RDT&E	0601103A	University Research Initiatives	\$93,129
Navy RDT&E	0601103N	University Research Initiatives	\$177,921
Navy RDT&E	0601153N	Defense Research Sciences	\$491,659
Air Force RDT&E	0601102F	Defense Research Sciences	\$377,473
Air Force RDT&E	0601103F	University Research Initiatives	\$189,591
DW RDT&E	0601000BR	DTRA Basic Research Initiatives	\$27,560
DW RDT&E	0601110D8Z	Basic Research Initiatives	\$75,126
DW RDT&E	0603680D8Z	Defense-Wide Manufacturing S&T	\$209,241
DW RDT&E	0601120D8Z	National Defense Education Program	\$115,641

*Dollars in thousands

In order to meet the objectives of the National Defense Strategy (NDS), including sustaining Joint Force military advantages and establishing an unmatched twenty-first century national security innovation base, we must invest in the basic research that will lead to the innovations our Services need to ensure technological superiority over competitor nations. DoD basic research investments have a long history of creating game-changing military technologies. Night vision, stealth, radar, sonar, jet engines, nuclear propulsion, and numerous innovations in microelectronics and semiconductors all can be traced to research supported by DoD basic research.

The Defense Research Sciences (DRS) programs in each of the Services fund basic research that expands our knowledge and understanding of the physical, engineering, environmental, and life sciences. DRS-sponsored basic research often can be the first step before transitioning to applied research and a future military capability. Much of this funding goes towards university projects across the country. For example, 70% of the Air Force's DRS funds go to universities. *Therefore, we respectfully request that the Defense Appropriations Subcommittee increase funding for DRS beyond the President's Budget to \$375.749 million for the Army's program (PE 0601102A); \$491.659 million for the Navy's program (0601153N); and \$377.473 million for the Air Force's program (0601102F).*

University Research Initiatives (URIs) play a particularly important role in developing future transformational military capabilities. Numerous advances in quantum information sciences, unmanned aircraft (UAS), nanotechnology, biological detection capabilities, and stealth detection sensors all stem from URI-sponsored scientific research. Unfortunately, the core URI programs, the Multidisciplinary University Research Initiative (MURI) and Defense University Research Instrumentation Program (DURIP), do not have the resources to meet demands. In FY 2020, 339 MURI proposals were unfunded and DURIP received proposals requesting \$295 million but was only able to award \$49 million. It is highly unlikely that competitor nations such as China and Russia are underfunding military scientific research in this way. *We respectfully request the Defense Appropriations Subcommittee increase funding for MURI and DURIP to address the many unfunded proposals:*

- *Army URI (PE 0601103A): MURI by \$15.9 million more than the President's Budget and DURIP by \$10 million more than the President's Budget, both within Project AB3;*
- *Navy URI (PE 0601103N): MURI by \$42 million more than the President's Budget and DURIP by \$18 million more than the President's Budget, both within Project 0000; and*
- *Air Force URI (PE 0601103F): MURI by \$19 million more than the President's Budget and DURIP by \$8 million more than the President's Budget, both within Project 615094.*

DTRA's basic research funding has been cut significantly in the past few years. What was once a fund for many single investigator grants now primarily funds small consortiums, which will limit participation and consideration of innovative ideas to counter and deter weapons of mass destruction. *We respectfully request that the subcommittee provide a \$12.9 million increase above the President's Budget for this promising program (PE 0601000BR).*

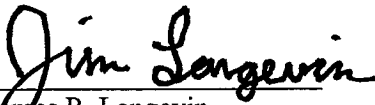
The FY 2021 budget proposes to eliminate funding for the Minerva Research Initiative from the Basic Research Initiatives program element. Minerva is DoD's signature social science basic research program that funds university-led teams to address problems of strategic importance to U.S. national security. Minerva has aligned its research with the NDS in support of Department-wide priorities. Recently funded Minerva projects, such as "Russian Disinformation and Propaganda Campaigns" and "Empirical Analysis for Meeting Great Power Challenges," have given DoD unique insights that help shape future national security policies and better position the warfighter in a complex global environment. In FY 2018, Minerva only funded 12 projects but received approximately 175 applications. As noted by DoD officials, many of the challenges we face are social or have social elements to them, and Minerva research is an important source of new ideas to better understand social aspects that are inherent to our security and stability. The program received \$11.4 million in FY 2020. *We respectfully request the Defense Appropriations Subcommittee provide \$17 million in funding for the Minerva project (P010) within the Basic Research Initiatives line (0601110D8Z) to restore this program and address the number of unfunded proposals.*

Finally, the Defense-Wide Manufacturing Science and Technology program provides resources for DoD's contribution to the Manufacturing USA Network and Manufacturing Engineering Education Program (MEEP). The Manufacturing USA Network is moving discoveries from the nation's leading research universities and laboratories to the defense industrial base while

enhancing the workforce. In FY 2018, over 475 major applied research and development projects were undertaken and more than 200,000 individuals participated in Manufacturing USA-led workforce development opportunities. MEEP recently awarded its first set of projects but could only afford to fund four grants. The DoD is not capitalizing on this program's potential. *We respectfully request the Defense Appropriations Subcommittee increase funding for the Manufacturing USA Network (P350) by \$100 million within the Manufacturing S&T line (0603680D8Z) and MEEP (P120) by \$15.4 million within the National Defense Education Program line (0601120D8Z), which would restore cuts in the President's Budget.*

Thank you in advance for your consideration. We look forward to working with you to ensure DoD has the appropriate resources to generate the new game-changing technologies to sustain the United States' global technological superiority.

Sincerely,


James R. Langevin

Michael Waltz

FY21 Minerva and other DoD Research Programs Signatories

Don Bacon
Joyce Beatty
Salud O. Carbajal
David N. Cicilline
Susan A. Davis
Val Butler Demings
Mike Doyle
Jefferson Van Drew
Anna G. Eshoo
Tulsi Gabbard
Josh Gottheimer
Deb Haaland
William R. Keating
Fred Keller
Ro Khanna
Andy Kim
Rick Larsen
Dave Loebsack
Stephen F. Lynch
Brian Mast
Joseph D. Morelle
Seth Moulton
Stephanie Murphy
Donald Norcross
Frank Pallone, Jr.
Scott Peters
Katie Porter
Mary Gay Scanlon
Albio Sires
Abigail D. Spanberger
Guy Reschenthaler
Kathleen M. Rice
Glenn 'GT' Thompson
Lori Trahan
Filemon Vela
Ted S. Yoho, DVM