

March 27, 2017

The Honorable James Mattis
Secretary of Defense
U.S. Department of Defense
1400 Defense Pentagon
Washington, DC 20301

Dear Mr. Secretary,

As you develop the FY 2018 U.S. Department of Defense (DOD) budget request that will include additional funding above the budget caps, the Coalition for National Security Research (CNSR), representing the undersigned research universities and institutes, scientific and professional associations, and businesses, respectfully requests that you seek to support robust and sustained growth in the DOD's basic research and Science and Technology (S&T) program budgets. We also urge you to use the funding appropriated in H.R. 1301, the Department of Defense Appropriations Act, 2017 as the basis for developing the FY 2018 DOD budget request.

As you can appreciate from your time in uniform, the defense basic research programs enable discoveries that have led to paradigm shifts in the military's technical capabilities. Our national security strategy calls for dominance over our adversaries. Basic research is many times the only way to solve complex problems that lead to transformational technologies and capabilities that have made the U.S. military the best fighting force on the planet. With countries like China more than tripling their spending on research and development over the past 17 years, now more than ever we need to support basic scientific research to enable discoveries and innovations that will provide the necessary military capabilities of tomorrow and help offset any technological innovations made by competitor nations. It is vital to our national security that the United States maintains its technical superiority; investing in defense basic research now will ensure our national security well into the future.

Making significant breakthroughs in fundamental research requires stable and long-term funding. While we agree that the U.S. must make investments to address near-term threats, we cannot underinvest in the basic research that enables discoveries that are the foundation of the innovation pipeline. To that end, we would like to draw your attention to the document: [Innovation: An American Imperative](#) (Innovation Imperative) - a statement signed by the CEOs of Northrop Grumman, Lockheed Martin, Boeing, Microsoft, and endorsed by over 500 other leading organizations from industry, higher education, and science and engineering. The Innovation Imperative urges Congress to end sequestration and provide steady and sustained growth in funding of **at least four percent** for basic scientific research at numerous agencies, including DOD. As a cosigner of the Innovation Imperative, CNSR believes that if the U.S. is to maintain its technological superiority, we must prioritize federal scientific research investments and support policies that promote innovation. *We urge you to include at least a four percent increase above levels in H.R. 1301 for the defense basic research programs in the FY 2018 DOD budget request.*

In addition, we remain concerned about the overall DOD S&T program. The 2001 Quadrennial Defense Review Report, Council on Competitiveness and National Academy of Sciences all have called for DOD S&T program budget to comprise at least 3% of the total budget. While we understand the

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Department has faced severe cuts over the past few years, the FY 2017 DOD S&T program budget request is approximately 1% or roughly \$5 billion below the recommended levels. The result is an S&T program that is not growing at levels necessary to advance military technologies our Warfighters need to continue to be the most effective fighting force in the world. With basic research serving as the first step in creating new military capabilities, the S&T program applies the knowledge gained from basic research to solve military problems and develop the systems and components to potential solutions are essential to fielding the military technologies of tomorrow. The private sector has no incentive to fund the majority of this type of research so federal funding is vital to advancing technologies beyond basic research. *We urge you to include robust funding for the DOD S&T program in the FY 2018 DOD budget request.*

Thank you for your consideration of our views. If we can be of any assistance as you develop the FY 2018 DOD budget request, please do not hesitate to contact us.

Sincerely,

CNSR Members

American Chemical Society
American Institute for Medical and Biological Engineering
American Mathematical Society
American Psychological Association
American Society for Engineering Education
American Society of Mechanical Engineers
Arizona State University
Association of American Universities
Association of Public and Land-grant Universities
Battelle
Boston University
Brown University
California Institute of Technology
Carnegie Mellon University
Columbia University
Computing Research Association
Consortium for Ocean Leadership
Cornell University
Duke University
Energetics, Inc.
Federation of Materials Societies
Florida International University
Florida State University
George Mason University
Georgia Institute of Technology
Harvard University
Indiana University
Institute of Electrical and Electronics Engineers - USA
Lehigh University
Louisiana State University
Louisiana Tech University
Massachusetts Institute of Technology
Materials Research Society
Michigan State University
Michigan Technological University
New Mexico State University
Northern Illinois University
Northwestern University
Oak Ridge Associated Universities
Ohio State University
Oregon Health and Sciences University
Oregon State University
Pace University

Penn State University
Princeton University
Purdue University
Rensselaer Polytechnic Institute
Rutgers, The State University of New Jersey
Semiconductor Industry Association
Society for Industrial and Applied Mathematics
SRI International
Texas A&M University
The Johns Hopkins University
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University of California System
University of Central Florida
University of Cincinnati
University of Colorado
University of Houston
University of Iowa
University of Maryland at College Park
University of Michigan
University of Missouri System
University of Nebraska
University of North Carolina – Chapel Hill
University of North Carolina System
University of Pennsylvania
University of Pittsburgh
University of Rochester
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University of Tennessee
University of Virginia
University of Washington
University of Wisconsin - Madison
Vanderbilt University
Washington State University
West Virginia University
Woods Hole Oceanographic Institution
Yale University

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