Massachusetts Institute of Technology
Graduate Student Council

Statement on the Importance of Funding Scientific Research

The Graduate Student Council (GSC) represents the 6,900 graduate students of the Massachusetts Institute of Technology (MIT) in all matters concerning their welfare, academic opportunities, and professional careers after graduation. We support all measures that increase federal research funding and that enable the development of cutting-edge technologies and innovations. Investments in research are essential to the sustained economic health, prosperity, and competitiveness of the United States. Therefore, the GSC urges strong and sustained growth in the allocation of federal funding for research.

Nobel prize-winning economist Robert Solow found that more than 60% of economic growth can be attributed to advancements in science and technology.¹ Federal research funding has played a critical role in the development of numerous technologies and innovations that are indispensable today, with examples to be found in fields ranging from information technology and energy to health and education. For example, funding from the National Science Foundation (NSF) supported the research that lead to the development of the Google search engine.² Research funded by the Department of Defense and DARPA brought about the development of GPS technologies.² Other examples of innovations that arose from federal funding include the internet, LED lighting, magnetic resonance imaging (MRI), and advanced prosthetics.² While research in the private sector can complement publicly-funded research efforts, private sector research remains primarily focused on late-stage refinements, and financial constraints prevent the pursuit of broad fundamental research portfolios.

In February 2018, the President’s budget proposal for fiscal year 2019 was released. The proposal calls for harsh reductions in funding for basic and applied research at a number of research agencies, including the complete elimination of the Department of Energy’s ARPA-E program, and severe cuts to the EPA’s Science and Technology research programs (-41%), the US Geological Survey (-21%), the NOAA Office of Oceanic and Atmospheric Research (-37%), and others.³ We oppose these proposed cuts, and urge Congress to maintain or increase current funding levels for these programs.

While Congressional appropriations are still being finalized for FY 2018, we were heartened by the passage of the Bipartisan Budget Act of 2018, which raised the caps on discretionary spending for FY 2018 and FY 2019. We urge members of the appropriations committees to allocate additional available funding to the agencies that engage in and facilitate basic and applied research, including the National Institutes of Health, the National Science Foundation, NASA, the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and others.

Cutting-edge research is crucial to the maintenance of the United States’ position as the world leader in technology and innovation. To this end, we support the passage of a number of bills that increase funding for research, including the National Biomedical Research Act (S. 2212), the Advanced Cutting-Edge Research Act (S. 2406 and H.R. 5002), the Flu Vaccine Act (S. 2438), the Medical Innovation Act of 2017 (S. 2172 and H.R. 4487), the Accelerating American Leadership in Science Act of 2018 (H.R. 4377), and the Nuclear Energy Research Infrastructure Act of 2018 (H.R. 4378).

³ “FY 2019 R&D Appropriations Dashboard,” AAAS (February 2018)
Ultimately, the GSC urges prioritization of research funding in budget and policy decisions. World class scientific work has been, and will continue to be, a key driver for economic competitiveness and improved quality of life in the United States.

Prepared by the External Affairs Board on behalf of the MIT Graduate Student Council. March, 2018