



To: Massachusetts Delegation Legislative Directors, Education LAs and Science LAs

From: **Boston University** – Jennifer Grodsky and Emily Burlij, Federal Relations
Harvard University – Suzanne Day, Kara Haas, and Peter DeYoe, Office of Federal Relations
Massachusetts Institute of Technology – David Goldston, Philip Lippel, and Kate Stoll, Washington Office
Tufts University – Mary Jeka and Rocco DiRicco, Government and Community Relations

Date: April 12, 2022

Re: Fiscal Year 2023 Programmatic Requests for Federal Science and Education Agencies

Please find attached information on fiscal year (FY) 2023 priorities for Massachusetts research universities to support your programmatic requests to the Appropriations Committee. We appreciate the strong backing for research and education within our delegation and look forward to working with you to sustain the Commonwealth's innovation and education ecosystem.

As the FY 2023 appropriations process begins, we encourage Congress to invest critically needed resources to create strong student aid and federal research programs. Massachusetts' leadership in higher education and research depends on robust, sustainable investment by Congress.

We are grateful that both Congress and the White House have signaled support for dramatically increasing student financial aid and reinvigorating science agencies like the National Science Foundation and the Department of Energy's Office of Science. We hope you can build on the significant Pell Grant increase in the Consolidated Appropriations Act of 2022, as well as fulfill the promise of significant funding called for in the research competitiveness bills passed by both chambers of Congress. It is imperative that Congress sustains this momentum with strong, consistent funding for research and education to meet the grand challenges of our time.

Thank you for considering these requests. We appreciate your ongoing advocacy on behalf of our students, faculty, and staff.

LABOR, HEALTH, AND HUMAN SERVICES, EDUCATION AND RELATED AGENCIES

National Institutes of Health (NIH)

FY 2023 Request: At least \$49.1 billion for NIH's base in addition to any funding provided for ARPA-H or pandemic initiatives

FY 2022 Enacted: \$45.2 billion

President's Budget Request: \$49 billion

Dear Colleague: Deadline April 22 COB; circulated by Reps. André Carson (D-IN), David McKinley (R-WA), and Brian Fitzpatrick (D-PA). Staff contact Diala Qasem (diala.qasem@mail.house.gov), with Rep. Carson.

Dear Colleague: Generally circulated by Sen. Bob Casey (D-PA)

More than 200 Massachusetts institutions successfully competed for over \$3 billion in funding from NIH in FY 2021. Our researchers are making discoveries to advance treatments and cures for diseases such as cancer, Alzheimer's disease, and mental health disorders. NIH also provides irreplaceable training support to early career biomedical researchers; this support must be expanded so as not to disrupt the research workforce or the recent gains in diversifying the STEM pipeline. Our request would provide needed growth for core NIH-funded research and is separate from our support for the new Advanced Research Projects Agency – Health (ARPA-H).

Advanced Research Projects Agency – Health (ARPA-H)

FY2023 Request: \$5.0 billion

FY 2022 Enacted: \$1.0 billion

President's Budget Request: \$5.0 billion

The Advanced Research Projects Agency for Health (ARPA-H) has the potential to transform health care research and health care by bringing together a variety of scientific disciplines to tackle specific health problems that require research breakthroughs. This will complement the approach of NIH, which tends to focus more on discovery research in the biomedical sciences. Modeled on DARPA, ARPA-H will fund high-risk, high-reward research using nimble contracting approaches and bold, milestone-driven projects to accelerate innovation in health. We support the President's request of \$5 billion.

Department of Education, Pell Grants

FY 2023 Request: \$13,000 Maximum Discretionary Award

FY 2022 Enacted: \$6,895 Maximum Discretionary Award

President's Budget Request: \$8,670 Maximum Discretionary Award

Dear Colleague: Generally circulated by Rep. Marcia Fudge (D-OH)

We urge Congress to double the maximum Pell Grant award for low-income students. The Pell Grant program is the foundation of federal student aid, helping more than 98,000 students attend college in Massachusetts. Our universities build on the foundation provided by Pell and other federal aid programs by providing students with our own institutional aid. As a result, we can maintain affordability and outstanding educational quality.

Department of Education, Federal Work Study (FWS)

FY 2023 Request: \$1.52 billion

FY 2022 Enacted: \$1.2 billion

President’s Budget Request: \$1.19 billion

Dear Colleague: Generally circulated by Sen. Kirsten Gillibrand (D-NY)

Federal Work Study helps student succeed in college and prepare for the world of work. Massachusetts universities participate in campus-based student aid programs at a very high level, with more than 30,000 Massachusetts students receiving FWS in the 2019-20 academic year.

Department of Education, Supplemental Education Opportunity Grant (SEOG)

FY 2023 Request: \$1.09 billion

FY 2022 Enacted: \$895 million

President’s Budget Request: \$880 million

Dear Colleague: Generally circulated by Sen. Kirsten Gillibrand (D-NY)

Campus-based student aid programs help students by leveraging federal dollars with universities’ own aid. SEOG awards are available to students with “exceptional need.” More than 30,800 Massachusetts students received SEOG during the 2019-20 academic year.

Department of Education, Institute of Education Sciences

FY 2023 Request: At least \$815 million

FY 2022 Enacted: \$737 million

President’s Budget Request: \$662.5 million

Dear Colleague: Deadline COB April 22; circulated by Rep. Suzanne Bonamici (D-OR), contact Josh.Izaak@mail.house.gov to sign on.

Dear Colleague: Generally circulated by Sen. Jeff Merkley (D-OR)

Investing in peer-reviewed education research activities at the Institute of Education Sciences results in innovations in both teaching and learning, improving classrooms around the nation. IES is the only federal agency exclusively devoted to funding educational research, and is playing a critical role in understanding learning loss due to the pandemic. A recent National Academies report laid out an equity-oriented science agenda for IES; an infusion of funds is needed to make this goal a reality.

Department of Education, International Education and Foreign Language

FY 2023 Request: \$161.1 million

FY 2022 Enacted: \$81.7 million

President’s Budget Request: \$78.1 million

Dear Colleague: Generally circulated by Rep. David Price (D-NC)

Dear Colleague: Generally circulated by Sens. Tammy Baldwin (D-WI) and Todd Young (R-IN)

The Title VI/ Fulbright-Hays International Education and Foreign Language programs support training in critical foreign languages, educational outreach activities for K-12 schools, and

curriculum development for the multidisciplinary study of regions around the world, including Eurasia, Africa, and the Middle East. In an increasingly interconnected world, these international education programs are an essential means for Massachusetts to develop a globally fluent citizenry. A funding level of \$161.1 million is consistent with the funding targets approved by both chambers as part of the America COMPETES and the US Innovation and Competition Acts.

Department of Education, Graduate Assistance in Areas of National Need (GAANN)

FY 2023 Request: \$35 million

FY 2022 Enacted: \$23.5 million

President’s Budget Request: \$23.5 million

GAANN fellowships provide financial support for Massachusetts graduate students pursuing doctoral education in fields that are critical to national priorities, including: biology; chemistry; computer and information sciences; engineering; mathematics; nursing; physics; and educational assessment, evaluation and research. Our request is the program’s authorized level.

Institute of Museum and Library Services (IMLS)

FY 2023 Request: \$309.5 million (\$232 million for Libraries and \$54.5 million for Museums)

FY 2022 Enacted: \$268 million (\$197.5 million for Libraries and \$47.5 million for Museums)

President’s Budget Request: \$276.8 million (\$201 million for Libraries and \$52 million for Museums)

IMLS is the primary source of federal funding for the nation’s museums and libraries, including many in Massachusetts, and this request builds on authorized levels for the agency. Through grants and local programs, the IMLS supports education, preservation, digitization, and many more programs to enrich the community. In fiscal year 2021, Massachusetts museums, universities, and libraries successfully competed for more than \$10.8 million in IMLS grants.

COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES

National Science Foundation (NSF)

FY 2023 Request: At least \$11 billion

FY 2022 Enacted: \$8.8 billion

President’s Budget Request: \$10.5 billion

Dear Colleague: Link to sign [HERE](#). Deadline COB Monday, April 25, circulated by Reps. G.K. Butterfield (D-NC; Contact: Christina.Donovan@mail.house.gov) and David McKinley (R-WV; Contact: Alexander.Weixel@mail.house.gov)

Dear Colleague: Generally circulated by Sen. Ed Markey (D-MA)

NSF is the federal government’s primary funder of basic research, supporting work across scientific disciplines with the potential to foster breakthrough discoveries. In FY 2021, NSF sponsored more than 850 competitive awards totaling approximately \$565 million to over 100 institutions in Massachusetts, ranging from K-12 schools and museums to research universities. NSF makes awards based on intellectual merit and societal impact, through a proven system of

peer review. Providing at least \$11 billion will allow the agency to fund additional meritorious proposals across all its research directorates while simultaneously providing sufficient resources to successfully launch NSF's new Technology, Innovation and Partnerships Directorate, as proposed in the President's budget request and as approved by both the House and Senate as part of the America COMPETES and US Innovation and Competition Acts.

National Aeronautics and Space Administration (NASA) Science account

FY 2023 Request: \$9.0 billion

FY 2022 Enacted: \$7.6 billion

President's Budget Request: \$7.98 billion

NASA is a key federal contributor to advancing research in the physical sciences on Earth and in space, and NASA-funded climate research is critical to understanding our planet. Massachusetts institutions continue to play key roles in major NASA missions. Researchers seek funding through the Science Mission Directorate's pool of grants, which are divided across the Directorate's four discipline-specific Divisions and the Space Grant Program to encourage space education.

National Aeronautics and Space Administration (NASA) Space Technology

FY 2023 Request: \$1.5 billion

FY 2022 Enacted: \$1.1 billion

President's Budget Request: \$1.4 billion

NASA Space Technology develops innovative tools and invests in cutting edge technology development that support some of the best minds in science. Moreover, it funds fellowship programs to support the next generation of innovators on Massachusetts campuses.

National Oceanographic and Atmospheric Administration (NOAA) Office of Oceanic and Atmospheric Research (OAR)

FY 2023 Request: At least \$666 million

FY 2022 Enacted: \$599 million

President's Budget Request: \$666 million

The Office of Oceanic and Atmospheric Research (OAR) provides the research foundation for answering scientific questions and infrastructure challenges related to ocean research. The OAR increases the effectiveness of observations, monitoring, and modeling to help states manage their infrastructure aquaculture and water resources, fisheries, as well as natural disaster planning and response approaches.

DEFENSE

Department of Defense (DOD) Basic (6.1) Research

FY 2023 Request: \$2.9 billion

FY 2022 Enacted: \$2.8 billion

President's Budget Request: \$2.4 billion

Our institutions support basic research, or 6.1 programs, across the services, including sustained funding for the Multidisciplinary University Research Initiative, which supports teams of faculty conducting research in high priority fields that cross typical scientific disciplines, and the National Defense Science and Engineering Graduate Fellowships program, which provides fellowships for doctoral students pursuing a degree of interest to the DOD. We also support the Minerva Initiative, the Department's premier social science research program that deepens understanding of the social, cultural, and political forces affecting areas of strategic importance to the U.S.

Defense Advanced Research Projects Agency (DARPA)

FY 2023 Request: At least \$4.1 billion

FY 2022 Enacted: \$3.9 billion

President's Budget Request: \$4.1 billion

The Defense Advanced Research Projects Agency (DARPA) funds high-risk, high-reward research that can lead to innovative applications for the warfighter. DARPA is known for its willingness to fund ambitious research, leading to game changing technologies such as GPS, automated voice recognition, and the Internet.

ENERGY AND WATER DEVELOPMENT AND RELATED AGENCIES

Department of Energy (DOE) Office of Science

FY 2023 Request: \$8.8 billion

FY 2022 Enacted: \$7.5 billion

President's Budget Request: \$7.8 billion

Dear Colleague: Generally circulated by Reps. Bill Foster (D-IL), Lee Zeldin (R-NY), and Randy Weber (R-TX)

Dear Colleague: Generally circulated by Sens. Dick Durbin (D-IL) and Tammy Duckworth (D-IL)

The DOE Office of Science is a key funder of discovery-based and use-inspired basic research in fields including physics, chemistry, materials science, environmental science, advanced scientific computing, biology, and applied mathematics. Massachusetts universities and scientific organizations received more than \$79 million in DOE Office of Science funding in fiscal year 2021, with major awards from every part of the Office. Massachusetts scientists also take advantage of world-class user facilities at ten DOE National Laboratories funded through the Office of Science.

DOE Advanced Research Projects Agency-Energy

FY 2023 Request: \$700 million

FY 2022 Enacted: \$450 million

President's Budget Request: \$700 million

ARPA-E supports early-stage energy technologies with transformational potential in order to lessen our reliance on energy imports, reduce energy-related emissions such as greenhouse gases, and improve energy efficiency. The full request would allow the agency to continue its work on the technologies needed for the transition to a net zero economy at the level authorized in the Energy Act of 2020. It would provide an additional \$125 million for additional projects, coordinated across all federal agencies, on technologies to counter the most devastating impacts of climate change via adaptation and resiliency; the Administration has proposed new authorizations for these additional efforts.

There are currently 42 active ARPA-E awards in the Commonwealth. Half are led by universities. Many others are led by companies spun out of our research programs and working to develop new products and industries in Massachusetts.

DOE Office of Energy Efficiency and Renewable Energy

FY 2023 Request: \$4 billion

FY 2022 Enacted: \$3.2 billion

President's Budget Request: \$4 billion

The Office of Energy Efficiency and Renewable Energy will continue to fund research, development, and implementation programs aimed at improving the energy efficiency of homes, buildings, and industrial processes; developing clean and efficient new vehicles and transportation systems; and developing affordable renewable technologies such as wind, solar, water, and geothermal energy. It has been reorganized to better focus on economy-wide emissions reduction targets and the workforce needs of a clean, environmentally just energy economy.

Massachusetts universities working towards a low-carbon energy future through EERE programs received nearly \$50 million in R&D awards in FY 2021, helping to make Massachusetts and New England leaders in the clean energy revolution. Massachusetts companies received an additional \$39 million to participate EERE programs, two-thirds to small businesses.

INTERIOR, ENVIRONMENT AND RELATED AGENCIES

Environmental Protection Agency (EPA) Science and Technology

FY 2023 Request: \$864 million

FY 2022 Enacted: \$750 million

President's Budget Request: \$864 million

EPA's Science and Technology (S&T) programs provide the foundation for credible decision-making to safeguard human health and ecosystems from environmental pollutants. EPA supports

research in a number of areas, including air quality, chemical safety, climate change, water and homeland security, among others, and is a key pillar to the President's efforts to advance environmental justice and equity. The budget for EPA S&T programs steadily eroded between fiscal years 2010 and 2021. We are pleased Congress started to reverse this trend in FY22, and hope Congress will continue to grow the S&T programs in FY23.

National Endowment for the Humanities (NEH)

FY 2023 Request: \$204 million

FY 2022 Enacted: \$180 million

President's Budget Request: \$200.7 million

Dear Colleague: Generally circulated by Rep. David Price (D-NC)

NEH provides support for humanities research, such as history, preserving endangered languages and cultures, and literature. NEH programs stimulate creativity and innovation, helping us better understand the social and international dimensions of complex questions. Between fiscal year 2012 and fiscal year 2021, the NEH has supported Massachusetts institutions with more than \$80.5 million in grants.

National Endowment for the Arts (NEA)

FY 2023 Request: \$204 million

FY 2022 Enacted: \$180 million

President's Budget Request: \$203.6 million

NEA provides support for Americans to participate in and engage with the arts across a wide variety of media and programs, including exhibits, concerts, readings, and other performances. This commitment to the arts—through state, local, and public-private partnerships—shares the benefits of these programs with every district in every state. In the past five years, the NEA distributed more than \$24.4 million in grants in Massachusetts.

**AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION,
AND RELATED AGENCIES**

National Institute of Food and Agriculture (NIFA) - Agriculture and Food Research Initiative (AFRI)

FY2023 Request: \$500 million

FY2022 Enacted: \$445 million

President's Budget Request: \$564 million

AFRI is the leading organization for competitive research grants in agricultural sciences. Massachusetts institutions play key roles in grant programs that support increased food production, improvement of food security, and enhancing human nutrition. Increased funding for this program will provide additional grant opportunities to continue this work and train the next generation of the agricultural research workforce.