



April 7, 2020

The Honorable Nancy Pelosi  
Speaker  
United States House of Representatives  
H-232, United States Capitol  
Washington, DC 20515

The Honorable Mitch McConnell  
Majority Leader  
United States Senate  
S-226, United States Capitol  
Washington, DC 20510

The Honorable Kevin McCarthy  
Minority Leader  
United States House of Representatives  
H-204, United States Capitol  
Washington, DC 20515

The Honorable Charles Schumer  
Minority Leader  
United States Senate  
S-255, United States Capitol  
Washington, DC 20510

Dear Speaker Pelosi, Majority Leader McConnell, Minority Leader McCarthy, and Minority Leader Schumer:

We represent the leading Washington voices for the research universities, medical schools, and teaching hospitals at the forefront of our nation's fight against the COVID-19 pandemic. We write today to thank you and the entire Congress for your tireless efforts to mitigate the pandemic's harmful health, economic, and societal consequences. We are grateful for the relief provided in the recently enacted bipartisan CARES Act to students and to the colleges, universities, and academic medical centers that serve them through their educational missions, as well as the measures included in the legislation to strengthen the provision of health care and services for millions of Americans.

We thank you for including in the CARES Act supplemental research funds to the National Institutes of Health (NIH), the National Science Foundation (NSF), and other agencies. These new funds will support the vital efforts of our member research universities, medical schools, and teaching hospitals to prevent, mitigate, treat, and, hopefully, cure COVID-19. Our efforts remain strong even though operations are handicapped by the physical distancing required to stem the spread of the virus.

We also write with urgency about the need to sustain the critical human infrastructure that undergirds the U.S. research enterprise and forms the basis of the longstanding government-university partnership that has been essential to ensuring our public health, national security, and economic growth and competitiveness for decades. That partnership is also critical to keeping the United States in the forefront of global research endeavors. While COVID-19 related-research is now in overdrive, most other research has been slowed down or stopped due to pandemic-induced closures of campuses and laboratories.

Given the current shutdown of many university-based and national laboratories due to the pandemic, we are deeply concerned that the people who comprise the research workforce – graduate students, postdocs, principal investigators, and technical support staff – and the future health and strength of the U.S. research enterprise, are at risk. We are therefore requesting government relief for the research

workforce that sustain the enterprise. As we described in our [March 19 letter](#) (sent when Congress was negotiating the CARES Act), our nation's science and engineering workforce – the same workforce that is currently battling COVID-19 and working to protect us from other pandemics – must be protected from the calamitous effects of the COVID-19 pandemic.

The longer this slowdown continues, the more strain and harm it will cause to the U.S. research enterprise and our nation's research workforce and capabilities. This will be compounded by anticipated reductions in research investments by states and industry due to their decreased revenues. While our nation's research capacity has demonstrated it can absorb shocks, the scale of this one is still growing and unprecedented in duration and impact. As such, it is vital that the federal government take measures to help relieve the strain and sustain the strength of our nation's research workforce and capacity.

In our previous letter, we identified four key areas of impact where substantial personnel and research-related costs will be incurred or there will be a loss of support due to inactivity. We have subsequently identified additional impacts and we summarize them in the following six key areas:

- 1. Sustaining the research workforce until operations return to full speed. This includes support for graduate students, postdocs, early career researchers, principal investigators, and technical support research staff.** Much of our nation's research workforce is effectively idled due to closed laboratories and severely limited research activities. While some are repurposing their efforts to aid in the fight against COVID-19 or attempting to analyze existing data and making other attempts at telework, for many more their federally supported research is delayed or will be set back because they are unable to access their laboratories and research facilities. Interrupted, delayed, or halted research will mean: some graduate students will not complete their degrees on schedule; the need for extended post-doctoral work; missed and delayed academic research career opportunities for early career researchers; and the loss of work and pay for the many staff scientists and technical workers who support research efforts on our campuses and at other major national research facilities. Continuing salary, benefits, stipend, and tuition support for graduate students, postdocs, principal investigators, and other research personnel and technical staff funded by federal research grants is critical to sustaining our research enterprise.

OMB, NIH, NSF, and other federal research agency guidance has helped in the short term to maintain the continuity of compensation through allowing for no-cost grant extensions. However, greater uniform implementation from the agencies is needed, and many researchers will need supplemental funding, or "cost extensions," to support the additional salary for their staff and students and to ramp up their work again when they are able to resume lab operations. The unknown duration of the crisis, coupled with the simultaneous tightening of budgets from non-federal sponsors, including state governments, foundations, private industry, and others, is creating a long-term problem of how research personnel and the research itself will be supported as compensation costs eat away at salary dollars originally included in grant, contract, and agency budgets.

- 2. Additional COVID-19-related research costs, including but not limited to personnel, personal protective equipment (PPE), supplies, equipment, and additional analytic capabilities.** The university research community has pivoted to address research questions that could have immediate bearing on alleviating the pandemic crisis, repurposing equipment, supplies, and

personnel that were almost uniformly funded with a different intent. The costs of this pivot are significant and represent a substantial financial burden that universities have shouldered.

3. **Ramp-down and eventual ramp-up of costs to close and restart research activities.** This includes but is not limited to:
  - donation or repurposing of personal protective equipment (PPE) from non-medical laboratories to hospitals and front-line medical professionals;
  - loss, destruction, or cryo-storage of cell cultures and biological samples;
  - disposal of hazardous materials and other environmental and safety costs;
  - care for animals, and in some cases replacement of animal subjects;
  - delays in clinical research caused by safety concerns for participants and use of healthcare facilities to care for COVID-19 patients; and
  - restarting experiments that could not be completed due to the closure of research facilities, inability of personnel to interact in the field, and/or missed seasonal opportunities.
  
4. **Inactivity of core research facilities and research and technical staff that support federally funded research by providing instrumentation, equipment, computation, analysis, and other research services.** These facilities, services, and research personnel are typically user-funded by direct charges to federal, industry, and other research grants and contracts, at a rate that is based on the services performed. These facilities and services at universities and hospitals are closed or operating well below capacity due to the ramp-down of research activity, and the personnel, equipment, and facilities are going largely unused and unfunded, while the costs of salaries and necessary upkeep continue. Importantly, these facilities and services include the personnel and infrastructure needed for clinical trials, most of which have been halted due to the pandemic.
  
5. **Compliance with federal regulations and audits.** During this disruption many researchers are repurposing their time and efforts to aid in the fight against COVID-19, donating or lending PPE and research equipment from their laboratories, and/or taking extraordinary measures in the care for animal research subjects or the preservation of research materials and specimens. Accordingly, these and other measures must be accounted for in federally required progress, safety and financial reports and audits. Our member institutions take very seriously their responsibility to steward federal resources granted and contracted to them and continue to document, report, and track personnel effort and related activities. The crisis, however, makes compliance very complicated, causes delays, and challenges both institutions and the federal research agencies with novel problems and the need for satisfactory solutions to ensure taxpayers' resources are used and accounted for appropriately.
  
6. **International graduate students and researchers visa status.** The usual flow of graduate students and postdocs from other nations has been interrupted because the crisis has severely limited their ability to obtain visas and travel. This is causing significant strain on our nation's scientific workforce in the short term and will have long-term implications for restarting research, as well as our nation's historic ability to attract and retain top talent from around the world.

We have updated the recommendations we previously sent you to better reflect the key areas of impact related to the pandemic. Many of the impacts described above will require principal investigators and their institutions to seek significant supplements to federal research grants and contracts to cover unforeseen costs in order to complete the research the government seeks. Anticipating this, we recommend including supplemental funds in the next COVID-19 relief and economic stimulus bill to address these impacts and sustain the core of our nation's research workforce and capabilities. Additionally, we recommend providing *temporary* regulatory and audit flexibility.

Specifically, we recommend:

- 1. Supplemental appropriations of \$26 billion for the major research agencies, including: NIH, NSF, Department of Energy, Department of Defense Science & Technology programs, NASA, USDA, NOAA, NIST, and others.**<sup>1</sup> In our previous letter, we recommended half of this amount based on our best estimate of two months of research slowdowns, laboratory closures, and identifiable harm to our research workforce and capabilities. It is clearer now that the duration and harm will be greater than anticipated, and the costs to sustain them will be larger. Accordingly, our revised recommendation of \$26 billion in supplemental extramural research funds anticipates a longer duration of three to four months. The supplemental funds should be used:
  - **to cover requests for research grant and contract supplements (i.e., cost extensions) due to COVID-19 related impacts**, including the need for additional salary support and/or research related ramp-up costs associated with a particular grant, contract or cooperative agreement;
  - **for emergency relief to sustain research support personnel and base operating costs for core research facilities and user-funded research services** until such time facilities reopen and research activities return to pre-pandemic activity levels; and
  - **to fund additional graduate student and postdoc fellowships, traineeships, and research assistantships for up to two years.** Graduate students who could not complete their degrees due to pandemic related impacts should be given priority for graduate fellowships and other forms of support so they can complete their research and degrees. This would greatly aid new doctoral degree recipients and postdocs needing additional time to complete their research and stay employed.

For core research facilities and similar user-funded research services, institutions should be eligible to apply for emergency relief funds from each agency that awarded grants or contracts that included charges for services provided by the core facilities of their institution. Institutions would apply to research agencies for relief funds up to the cost of meeting shortfalls in current personnel costs and base operating costs. Relief funds for this purpose would be primarily used to sustain research personnel employment.

We recommend that should there be any unspent supplemental funds for COVID-19 related impacts within the next 12 months, then the agencies should reprogram the funds for additional

---

<sup>1</sup> Based on estimates from the American Association for the Advancement of Science for FY19, the federal government in total spent approximately \$85 billion for basic and applied research. Our original recommendation was for 15 percent of \$85 billion, which is approximately \$13 billion and would address the negative impacts on research for approximately 2 months. Our updated recommendation assumes 3-4 months of reduced research activity and we recommend 30 percent or approximately \$26 billion to meet this longer period of time. While imprecise, we recommend this total level of funding to be divided among the major federal research agencies based on the size of their extramural research budgets.

graduate and postdoc traineeships and fellowships and/or new research awards. This would strengthen our nation's research workforce pipeline, have a longer-term stimulus effect, and help improve our nation's research competitiveness.

2. **Urge or require that federal research agencies immediately implement uniform guidance and policies that provide flexibility for research institutions during this national health emergency to cover salaries, benefits, and tuition support for graduate students and research personnel engaged in federally sponsored research grants and contracts.** Although some agencies have issued such guidance, others have lagged in doing so or have not taken full advantage of the flexibilities provided in the March 19 OMB guidance. Those agencies who have not issued guidance or issued only partial guidance should be urged or required to issue uniform guidance that implements flexibilities across all funding mechanisms.
3. **OMB and the research agencies should be directed to provide *temporary* regulatory and audit flexibility during the pandemic period and for a year afterwards. Subsequent government audits conducted for this period also should allow for additional flexibility, particularly as it relates to the accounting of time and effort reporting given the extreme and unique situation.** Agencies should support compliance solutions implemented by research institutions that enact the OMB-directed flexibilities that have been afforded to compensate graduate students, postdocs, and research personnel, as well as to implement other administrative practices. Further, rules and auditor expectations for conducting audits required under the Single Audit Act and the OMB Compliance Supplement should be modified to reflect the unprecedented situation, and as such, audit findings should be tempered accordingly. Additionally, financial and other regulatory audits specific to research grants should be postponed to permit institutions to address current exigencies brought on by COVID-19. The pandemic and its impacts on the terms and conditions of grants and contracts should be recognized and amendments and flexibility should be afforded in amending the terms of research grants and contracts that are currently in place between universities and federal funding agencies.

We understand Congress may consider national infrastructure needs as part of the next COVID-19 related legislative package. In this event, we encourage you to consider our nation's research infrastructure especially as it pertains to pandemics. In addition to the financial strains at core research facilities previously described, COVID-19 is demonstrating the need for more resilient, comprehensive, and efficient research infrastructure. It also is revealing some unmet needs that are hampering to varying degrees the fight against COVID-19 and holding back our nation's research capabilities and those of the entire U.S. innovation system. If Congress determines infrastructure needs should be addressed in future relief and stimulus packages, we encourage your consideration of new investments in research infrastructure important to addressing the pandemic and to enhancing our nation's overall research capabilities and competitiveness for years to come, including, but not limited to: high-speed computation; easily accessible and large-scale research data repositories; laboratory and research working environments with greater resiliency to pandemics; and core facilities upgrades to modernize shared instrumentation and equipment to increase their research capabilities, services, and efficiency.

Finally, as mentioned previously, the strain on the U.S. scientific workforce due to restrictions on the international flow of talented students and researchers is growing during the COVID-19 crisis. We believe the State Department and USCIS should be given all the resources and funding support necessary to ameliorate (as soon as possible, considering possible health concerns) the backlog of pending visa renewals and applications for new nonimmigrant visas. Action in this regard is critical to

the U.S. research workforce in the short and long term, and it will also reinvigorate international student tuition revenues to American universities.

As the associations representing the institutions at the forefront of the battle against this pandemic, we appreciate your consideration of these recommendations to reinforce our nation's scientific and medical research workforce and welcome the opportunity to work with you.

Thank you for your leadership during this extraordinary time of crisis.

Sincerely,



Mary Sue Coleman  
President  
Association of American Universities



Peter McPherson  
President  
Association of Public and Land-grant Universities



David Skorton  
President and CEO  
Association of American Medical Colleges



Ted Mitchell  
President  
American Council on Education

The Association of American Universities (AAU) is an association of 63 U.S. and two Canadian leading research universities that transform lives through education, research, and innovation. AAU member universities collectively help shape policy for higher education, science, and innovation; promote best practices in undergraduate and graduate education and strengthen the contributions of leading research universities to American society. The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization with a membership of over 200 public research universities, land-grant institutions, state university systems, and affiliated organizations in the U.S., Canada, and Mexico, that is dedicated to strengthening and advancing the work of public universities. The Association of American Medical Colleges (AAMC) is a not-for-profit association dedicated to transforming health care through innovative medical education, cutting-edge patient care, and groundbreaking medical research. Its members comprise all 155 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems; and more than 80 academic societies. The American Council on Education (ACE) is a membership organization that mobilizes the higher education community to shape effective public policy and foster innovative, high-quality practice. As the major coordinating body for the nation's colleges and universities, our strength lies in our diverse membership of more than 1,700 colleges and universities, related associations, and other organizations.