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April 13, 2020

Mr. Richard Obermann
Democratic Chief of Staff
House Committee on Science,
Space and Technology
2321 Rayburn HOB
Washington, DC 20515

Mr. Josh Mathis
Republican Chief of Staff
House Committee on Science,
Space and Technology
2321 Rayburn HOB
Washington, DC 20515

Dear Mr. Obermann and Mr. Mathis:

On behalf of the American Physical Society – the nation’s largest physics organization with more than 54,000 members in academia, the private sector and national labs – I want to thank you for the opportunity to provide input and ideas related to future economic stimulus packages aimed at addressing and mitigating the near- and long-term impacts of the COVID-19 crisis.

As you know, the current pandemic has resulted in a severe reduction in activity, and in many cases a complete shutdown, of our universities and national laboratories. While the full impacts to our community cannot be determined at this time, we are already seeing damaging strains related to research funding and the STEM workforce. Absent swift and significant actions by Congress, these challenges put the future health of the U.S. scientific enterprise – and the workforce that supports it – at risk.

The policy and funding recommendations outlined below address issues related to federal grants, restarting laboratories, and the STEM workforce. APS is carrying out surveys to quantify the severity of the challenges, but with that work still underway, our recommendations are currently based on extensive discussions with principal investigators (PIs) from a diverse range of institutions. We have focused on actions that can have the widest benefit, rather than highlighting issues that are unique to particular campuses. These actions, taken together, can help ensure that when this crisis ends, our nation’s research capabilities are fully restored.

Federal Grants

Federal agencies should immediately provide guidance to program managers to relax grant submission deadlines. Many of us are experiencing additional pressures in working remotely, including childcare and eldercare responsibilities, and can no longer meet grant submission deadlines that were

established before the coronavirus pandemic hit. There are numerous cases of PIs reporting that solicitation deadlines are not being extended for particular programs at DOE and NSF.

- **Federal agencies should provide current grantees full or partial cost extensions, as necessary.** APS fully supports OMB providing federal research agencies the flexibility to allow research personnel, including graduate students and postdocs, to continue to receive compensation from federal grants during this crisis. As a result, however, many grants are being spent down, but the lab is shuttered so the research is not being carried out. For those grants, the PI will be unable to meet the project scope even if provided extra time because there will be insufficient funds to carry out the research. In those cases, a full or partial cost extension will be necessary to complete the work. Such cost extensions would also ensure that graduate students funded under those grants will have the support necessary to complete their PhD research.

Restart/Ramp-up Funding

- **Supplemental funding necessary to restart labs and experiments should be provided to appropriate grantees.** Many PIs will need ramp-up funding in order to restore their research once the lab reopens. For example: many materials research labs that carry out months-long sample fabrication now have to restart the entire fabrication process; many low-temperature researchers will need additional resources to bring their cryogenics back on line; and many clean-room research groups donated their PPE to local health care systems and will need both resources and time to replace that equipment.

Workforce

- **Substantially increase REU funding for Summer 2021.** With many REUs canceled for this summer, steps should be taken to help ensure we maintain our capacity to train our future STEM workforce. By substantially increasing REU funding for 2021, institutions will be able to accommodate a full class of new REU students plus provide them to students who, if they are still undergrads in 2021, were scheduled to participate this summer.
- **Provide State Department and USCIS the necessary resources or methods to process the backlog of pending visa renewals as well as the applications for new nonimmigrant visas.** Many international undergraduate STEM students and visiting scholars returned to their countries when U.S. institutions closed, and they will need their visas processed in order to return in the fall. Most international graduate students will have to extend their timeline for a PhD, and consequently will require an F-1 visa renewal. While outside the Science Committee's jurisdiction, ensuring international students and researchers can return to their institutions and labs in a timely manner is a top priority for APS. International scientists make up a significant segment of our STEM workforce, and a return to our pre-pandemic research capabilities will require the prompt return of international students and scientists to the U.S.
- **Enhanced Domestic Scholarship Program.** Given the likelihood that many international students will be unable to attend U.S. institutions this upcoming academic year because of the constraints mentioned above, federally funded programs that support and encourage domestic students' pursuit of STEM degrees should be enhanced.

Thank you again for the opportunity to provide input. We stand ready to work with you and your colleagues to develop and enact policies that will ensure the U.S. can continue its global leadership in science, technology and innovation. If you require additional information or would like to discuss these issues

further, please do not hesitate to contact APS's Chief Government Affairs Officer Francis Slakey (slakey@aps.org; 202.662.8706).

Sincerely,

A handwritten signature in blue ink that reads "Philip H. Bucksbaum". The signature is written in a cursive style with a long, sweeping tail on the final letter.

Philip H. Bucksbaum