

April 13, 2020

The Honorable Eddie Bernice Johnson  
Chairwoman  
House Committee on Science, Space and  
Technology  
2321 Rayburn House Office Building  
Washington, DC 20515

The Honorable Frank Lucas  
Ranking Member  
House Committee on Science, Space and  
Technology  
2321 Rayburn House Office Building  
Washington, DC 20515

Dear Chairwoman Johnson and Ranking Member Lucas:

The American Society for Microbiology (ASM) is one of the largest professional societies dedicated to the life sciences and is composed of 30,000 scientists and health practitioners. ASM's mission is to promote and advance the microbial sciences. ASM thanks the House Science, Space, and Technology Committee for its ongoing bipartisan support for and commitment to basic, translational, and applied research and the infrastructure needed to support that research. We appreciate this opportunity to provide input on near-term and future economic stimulus packages, specifically in the areas of research funding, coordination, and continuity, as well as long-term research infrastructure.

ASM and its members are at the forefront of the SARS-CoV-2 pandemic, especially our members who direct and work in clinical microbiology laboratories and hospital settings around the country. During the first quarter of the outbreak, the urgent nature of the crisis has required us to focus primarily on clinical issues such as advocating for the scaling of testing capabilities, expressing concerns over shortages of materials, advocating for clinical research on vaccines and therapies against the virus, and providing a forum where hospital lab directors can confidentially consult with one another and collaborate. However, there is a dire need to provide aggregated access to vetted fundamental research on SARS-CoV-2 and other relevant viruses in order to ensure maximum acceleration of fundamental discoveries which underpin our chances of defeating the pandemic.

ASM is also deeply concerned about the serious consequences of disruptions to the broader research enterprise. As is the case in the overall economy, researchers, students, post-docs and lab personnel have had their work cut short. This has implications not only for the workforce – where hiring has been disrupted and employees furloughed – but also on the process of scientific discovery. Experiments will need to be restarted, animal colonies repopulated and fieldwork rescheduled for an indeterminate later time. The people who comprise the research workforce, including graduate students, postdocs, principal investigators, laboratory and technical support staff need to be financially supported through this time. The longer the slowdown continues, the more serious the consequences will be.

### **Opportunities for Additional R&D and Related Activities Specific to COVID-19 Response and Recovery**

**Research Coordination:** ASM is currently developing a scientific registry of curated information to provide a knowledge resource to accelerate basic scientific research on SARS-CoV-2 and the eventual translation of this research into clinical applications. The ASM COVID-19 Research Registry will serve as a clearinghouse for relevant foundational research and serve as an incubator for scientists to develop new ideas in the fight against SARS-CoV-2 and future threats. This pilot project underscores the urgent need for stable, long-term investments at the federal level to create cross-disciplinary repositories of information on pathogens and to provide a space for researchers to communicate about ongoing bench work. In the event of future pandemics, such repositories could facilitate and accelerate fundamental

research into emerging pathogens, facilitating more rapid development of vaccines, diagnostics, and countermeasures. It is our hope that ASM COVID-19 Research Registry can serve as a model for future interdisciplinary collaboration, coordinated at the federal level.

**Investment in R&D:** We strongly encourage Congress to learn from the lessons of the past and immediately commit to providing robust, sustained, and predictable funding for federal scientific agencies to develop a pipeline for research into SARS-CoV-2 and similar pathogens. Of the many diagnostics, vaccines, and treatments currently in development, only a few will be adopted on a broad scale. Knowing that this is not our first pandemic, nor will it be our last, DOE Office of Science should encourage and support continued scientific inquiry, building on the wealth of knowledge created in just a few short months, and leverage its supercomputing resources as well as capacity for epidemiological modeling and surveillance. DOE should also ensure the National Laboratories are accessible and working with the research community to raise awareness of the labs' capacity.

### **Near-Term Response to COVID Impacts on the Larger Research Enterprise**

We are facing an unprecedented disruption to the federal research pipeline. Microbiologists conducting federally-funded research are facing lab closures and delays, compounded by an absence of clear and consistent guidance from federal funding agencies regarding deadlines, extensions, and reducing barriers to getting those extensions. Students and post-docs face an increasingly uncertain future. The following key issues should be addressed in the next stimulus package to both reassure researchers, students, and clinical staff and to ensure a steady return to normal operations:

- Strengthen the patchwork of existing guidance provided by federal agencies and communicate with researchers in a timely manner.
- Provide emergency supplements to existing grants for ramp-down and eventual ramp-up of research activities, including additional salary support, funding for core research facilities, and user-funded research services.
- Fund additional graduate student and postdoc fellowships, traineeships, and research assistantships for up to two years.
- Direct federal funding agencies to provide temporary regulatory and audit flexibility during the pandemic period and for a year afterwards.

### **“Shovel-Ready” Infrastructure**

DOE Office of Science supports 27 world-class scientific facilities across the U.S. that advance innovation, partnership, and commercialization of new discoveries. These facilities include the National Laboratories, some of which are currently being deployed to support COVID-19 response efforts. Many of these facilities have long foregone necessary modernization to keep them state-of-the-art; we request that Congress address deferred maintenance at the National Labs now in order to support coronavirus response efforts as well as ongoing research. In addition to this investment, we strongly recommend that Congress fund new and upgraded instruments at Office of Science user facilities and shared research facilities, including those that build on the success of the Human Genome Project between DOE and the National Institutes of Health. As scientists return to work, additional resources will be needed to restart operations of facilities, laboratories, and enabling infrastructure at both DOE national laboratories and research universities. Investments in infrastructure and instrumentation now will allow the DOE to focus their resources on scientific discovery.

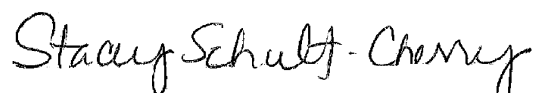
## Long-term Economic Stimulus Recovery

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. ASM strongly recommends that Congress adopt the following principles to guide future policy:

- Robust, sustained and predictable funding increases for agencies and programs that support the basic, translational, clinical, and applied microbial sciences.
- Development of infrastructure resources, improved data collection and curation, and technologies that allow interdisciplinary collaboration.
- The promotion of diversity, equity and inclusion in science because doing so leads to better science and greater scientific advancement. In order to increase awareness of and decrease disparities, increasing diversity is imperative, including affirmative steps to address and eliminate discrimination and harassment on the basis of race, religion, gender, sexuality, nationality, class, education, disability and/or social position.
- Support for formal and informal scientific collaboration regardless of national boundaries, while protecting the integrity of the publicly-funded research enterprise.
- The development of primary, secondary and university curricula based on sound, rigorous science, as opposed to politics or personal beliefs, which includes a deep understanding of the role of the microbial sciences in the global challenges they face and prepare them to creatively, ethically and innovatively solve problems at all levels.
- Support for early-stage investigators, which is essential to fostering the discoveries and advancements of tomorrow
- Widespread access and distribution of high-quality peer reviewed research.
- Safeguarding of the peer review process, and the recognition that peer review is an integral part of the scientific process and should be protected from non-scientific considerations.

The American Society for Microbiology thanks the House Science, Space, and Technology Committee for making research and development a key priority. ASM and its members look forward to next steps in this endeavor and stand ready to assist you. For more information, please contact Allen Segal, ASM Director of Public Policy and Advocacy, at [asegal@asmusa.org](mailto:asegal@asmusa.org) or 202-942-9294.

Sincerely,



Stacey Schultz-Cherry, Ph.D.  
Chair, Public and Scientific Affairs Committee  
American Society for Microbiology