

April 15, 2020

The Honorable Nancy Pelosi
Speaker
U.S. House of Representatives
Washington, DC 20515

The Honorable Kevin McCarthy
Republican Leader
U.S. House of Representatives
Washington, DC, 20515

The Honorable Mitch McConnell
Majority Leader
U.S. Senate
Washington, DC 20510

The Honorable Charles Schumer
Minority Leader
U.S. Senate
Washington, DC 20510

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

The American Society for Microbiology (ASM) appreciates the swift action taken by Congress to pass the Coronavirus Aid, Recovery, and Economic Security Act to meet the urgent demands placed on our nation by the COVID-19 pandemic. As Congress negotiates additional legislation to address ongoing challenges, we urge you to include supplemental support for federally-funded researchers whose work has been disrupted by the pandemic, and we urge you to consider infrastructure needs for ongoing pathogen-focused basic, translational, and applied research across the country.

ASM is one of the largest professional societies dedicated to the life sciences and is composed of 30,000 scientists and health practitioners. Our mission is to promote and advance the microbial sciences. Thousands of ASM's members are on the front lines of the SARS-CoV-2 pandemic, most especially our members who direct and work in clinical microbiology laboratories and hospital settings around the country. In addition to addressing the clinically-focused challenges, ASM recognizes a critical need to: (1) provide aggregated access to scientifically-vetted fundamental research to further our understanding of and provide direction to research on SARS-CoV-2; (2) ensure maximum acceleration of fundamental discoveries which underpin our chances of defeating the pandemic; and, (3) ensure that federally funded researchers have the support needed to mitigate the negative scientific and economic effects of the COVID-19-related laboratory closures and disruptions on research already in progress.

Below are a series of recommendations to address these needs in the research enterprise for your consideration, specifically in the areas of research funding, coordination, and continuity, as well as long-term research infrastructure.

Create a federal, cross-disciplinary repository of ongoing research on viral pathogens, including SARS-CoV-2, to facilitate scientific exchange and more rapid progress toward understanding, preventing, and treating COVID-19

ASM is currently developing a registry of curated scientifically-vetted information to establish a knowledge resource aimed at accelerating basic scientific research on SARS-CoV-2 and the eventual translation of this research into clinical applications such as vaccines and therapeutics. 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. 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 the ASM COVID-19 Research Registry can serve as a model for future interdisciplinary collaboration, coordinated and funded at the federal level.

Commit to providing robust, sustained, and predictable funding for federal scientific agencies to continue the pipeline of research on SARS-CoV-2 and similar emerging pathogens

It is no longer a question of if, but when, the next pandemic will hit. Knowing that this is not our first pandemic, nor will it be our last, Congress should prioritize continued long-term scientific inquiry into viral pathogens at federal science agencies including the National Institutes of Health, the Department of Energy, and the National Science Foundation, building on the wealth of existing knowledge and leveraging existing supercomputing and laboratory resources as well as capacity for epidemiological modeling and surveillance.

Robust and predictable federal investments are essential to our understanding of neglected and emerging diseases. Following both the SARS epidemic of 2002-2003 and the MERS outbreak of 2012, also caused by novel coronaviruses, we experienced a troubling cycle of boom-bust funding for emerging and reemerging pathogens that left us vulnerable to the inevitable next wave, which we are currently witnessing. Interruptions due to shifting priorities can wreak havoc and slow progress when a new pandemic hits. Given the resource-intensive nature of this work, the private sector cannot afford to take on this work, especially given the limited market for therapeutics and treatments. Sustained federal funding for non-profit and academic research centers is the only way to develop preventative measures, diagnostics, and therapeutics as well as advance toward basic understanding of properties of these pathogens, such as how long recovered patients maintain immunity.

Commit to the long-term resilience of our nation's research workforce and capacity

ASM is also deeply concerned about the serious consequences of the current disruption 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 longer the slowdown continues, the more serious the consequences will be, especially on the people who comprise the research workforce, including graduate students, postdocs, principal investigators, laboratory and technical support staff.

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 increase support for the research enterprise. ASM specifically recommends that Congress do the following:

- Strengthen the patchwork of existing guidance provided by federal agencies and communicate with researchers in a timely manner and provide emergency supplements to existing grants for ramp-down and eventual ramp-up of research activities.
- Fund additional graduate student and postdoc fellowships, traineeships, and research assistantships for up to two years and direct federal funding agencies to provide temporary regulatory and audit flexibility during the pandemic period and for a year afterwards. These steps will reassure researchers, students, and clinical staff and support a steady return to normal operations.

Address deferred maintenance at federally funded scientific facilities in order to support coronavirus response efforts as well as ongoing and future research

We strongly recommend that Congress fund new and upgraded instruments at scientific 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. 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 modernization needed to keep them state-of-the-art. Investments in infrastructure and instrumentation now will allow federal agencies to focus their future resources on scientific discovery.

The American Society for Microbiology is grateful to Congress 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 or 202-942-9294.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stefano Bertuzzi'.

Stefano Bertuzzi, Ph.D., MPH
CEO
American Society for Microbiology