



AMERICAN
SOCIETY FOR
MICROBIOLOGY

May 10, 2021

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

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

Dear Chairwoman Johnson and Ranking Member Lucas:

The American Society for Microbiology (ASM), one of the oldest and largest life science societies, is pleased to support the *National Science Foundation for the Future Act*. As a global society whose mission is to promote and advance the microbial sciences, ASM appreciates your leadership and the House Science, Space, and Technology Committee's bipartisan commitment to basic, translational, and applied research and the infrastructure needed to support that research.

ASM is especially pleased that that bill would authorize robust and sustained funding increases for the National Science Foundation (NSF) to achieve a funding level of \$13.5 billion by 2026. Microbes are the foundation of scientific discovery, and the NSF is a key supporter of microbial science research. NSF funding has supported fundamental research into microbiomes, discovery of emerging pathogens, and the promotion of global collaboration. The *NSF for the Future Act* affirms the committee's commitment to maintaining American leadership in science and technology.

Promoting innovation

The National Science Foundation is a leader in bold and innovative thinking on future directions for science and ASM supports this legislation's creation of a new directorate at NSF, with appropriate safeguards for existing directorates. Harnessing the innovation mindset is key to moving forward with this new directorate, and it should be provided with a coherent and sustainable strategy that allows for broad collaboration on ongoing and emerging societal challenges with regular, periodic updating of the key focus areas by NSF with robust stakeholder input.

NSF is well-suited to coordinate forward-thinking multidisciplinary research. Microbiome science is one example of solutions-focused research that aims to advance understanding of microbial communities (microbiomes). Microbiome research presents unique opportunities to address the world's toughest scientific and technological challenges in energy, food, health, and environmental security and sustainability. Successfully leveraging these opportunities requires a robust and sustained federal investment in microbiome research—far beyond what has been envisioned to date. Increased funding for NSF research will catalyze further microbe-powered solutions.

Fostering a Scientific Workforce for the Future

ASM applauds the Committee's continued efforts strengthen STEM education and build a workforce capable of tackling current and future challenges, as well as the Committee's ongoing efforts to tackle the pervasive problem of harassment and discrimination in STEM fields. As the *NSF for the Future*

Act moves forward, ASM requests that the Committee include the following legislation to bolster diversity, equity, and inclusion in STEM:

- The Combatting Sexual Harassment in Science Act, which addresses the pervasive nature of sexual harassment in academia;
- STEM Opportunities Act, which provides guidance, data collection, and grants for groups historically underrepresented in STEM education at institutions of higher education (IHEs) and at federal science agencies
- MSI STEM Achievement Act, which supports efforts to increase STEM education at minority-serving institutions of higher education.

Federal science agencies must embrace and promote diversity, equity and inclusion in science because doing so leads to better science and greater scientific advancement. We are particularly pleased to see the authorization of the NSF INCLUDES Program and updates to the Graduate Research Fellowship Program in this legislation.

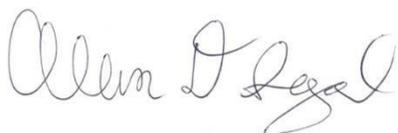
Balancing Access, Security, and Ethical Stewardship of Research Data

We appreciate the Committee's approach to access, security, and ethical stewardship of NSF-funded research. There is an urgent need for investments at the federal level to create sustainable cross-disciplinary repositories of information and to provide a space for researchers to communicate about ongoing bench work that cuts across agencies and funding streams. ASM supports the Committee's efforts to ensure that NSF coordinates with the stakeholder community in developing trusted open repositories, accounting for discipline-specific needs and with necessary protections for sensitive information.

For seventy years, the NSF has invested in basic research and education at the frontiers of science and engineering, including high risk and transformative research not supported by other funding sources. This work, which is funded across several NSF programs and directorates, is integral to the growing bioeconomy. As we continue to grapple with a deadly pandemic and face daunting challenges such as global climate change, ASM applauds efforts to restore science to its rightful place in the development and implementation of policies that affect human health and the world around us. A viable future for our planet depends on science and technology, and microbiologists will play a key role.

On behalf of ASM and its members, thank you again for introducing this important legislation, and the Society stands ready to assist you as the legislative process moves forward. If you have any questions, please contact me at asegal@asmusa.org or 202-942-9294.

Sincerely,



Allen D. Segal ASM Director of Public Policy and Advocacy