Outside Witness Testimony from: Society for Industrial and Applied Mathematics (SIAM)

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Submitted to the Subcommittee on Labor, Health and Human Services, Education and Related Agencies
Committee on Appropriations, United States Senate

Testimony on the Fiscal Year 2026 Appropriations for the Department of Health and Human Services

June 13, 2025

Summary: This written testimony is submitted on behalf of the Society for Industrial and Applied Mathematics (SIAM) **to urge Congress to provide the National Institutes of Health (NIH) with $51.3 billion for the base program level in fiscal year (FY) 2026.** It is critical that we protect from further cuts research investments that have yielded numerous scientific advances improving health outcomes and contributing to economic growth nationwide. Research funded by NIH is critical to saving lives, advancing health, and ensuring that the U.S. maintains its role as the global leader in biomedical research. In this, SIAM urges NIH to retain the clear and unique role of the National Institute of General Medical Sciences (NIGMS) and the National Institute of Biomedical Imaging and Bioengineering (NIBIB) in any reorganization of NIH. SIAM is impressed with the Advanced Research Projects Agency for Heathy (ARPA-H) and encourages Congress to continue to provide robust funding for the agency as it continues its growth. SIAM also urges Congress to reject harmful facilities and administrative (F&A) costs that would cripple the nation's research ecosystem. **In addition, SIAM supports $50 million in funding to be available in FY 2026 for the Centers for Disease Control (CDC) Prevention's Center for Forecasting and Outbreak Analytics (CFA).**

Full Statement: On behalf of SIAM, we submit this written testimony for the record to the Subcommittee on Labor, Health and Human Services, Education and Related Agencies of the Committee on Appropriations of the U.S. Senate.

SIAM has over 13,000 members, including applied and computational mathematicians, computer scientists, data scientists, numerical analysts, engineers, statisticians, and mathematics educators. They work in industrial and service organizations, universities, colleges, and government agencies and laboratories all over the world. In addition, SIAM has almost 500 institutional members, including colleges, universities, corporations, and research organizations. SIAM members come from many different disciplines but have a common interest in applying mathematics in partnership with computational science to solve real-world problems, which affect national security and industrial competitiveness.

We would like to emphasize that SIAM appreciates your Committee's recognition of the critical role of the National Institutes of Health and its support for biomedical research, science, and engineering in enabling a strong U.S. economy, workforce, and society. We understand the difficult fiscal environment that we all face. However, we are deeply concerned about the potential for significant cuts to HHS agencies in FY 2026, which will harm our nation's critical research and public health, and damage our research ecosystem.

Today, we submit this testimony to ask you to reconfirm Congress' support of NIH, ARPA-H, and CDC in FY 2026 and beyond. ***In particular, we join with the research and higher education community and request that you provide NIH with at least $51.3 billion in funding for FY 2026, as well as $50 million for the CDC Prevention's Center for Forecasting and Outbreak Analytics (CFA).*** The greater SIAM community greatly appreciates the lasting commitment Congress has shown to NIH and HHS broadly. Artificial intelligence (AI), machine learning (ML), data science, high performance computing, and quantum computing have tremendous potential to transform health and biomedical research. Congress should continue to make robust investments at HHS in the areas of AI, ML, data science, high performance computing, and quantum computing.

SIAM's mission areas align closely with the National Institute of Biomedical Imaging and Bioengineering (NIBIB) within NIH. NIBIB leads or co-leads many NIH efforts on modeling, data, and AI. NIBIB plays a crucial role at NIH for computational advancements and the development of new technologies and techniques that can be used to address many research and disease areas. The National Institute of General Medical Sciences plays an important role at NIH in supporting computational biology aimed at understanding fundamental cellular and molecular systems that are not disease or organ specific. NIGMS has a unique culture and is often a leader in promoting best practices in workforce development. The Institute thoughtfully considers how to bring researchers with limited NIH exposure, such as those in the mathematical sciences community, into productive NIH research and partnerships that innovate new models of support for team science. In any reorganization of NIH, Congress should ensure that NIGMS and NIBIB continue their clear and unique roles at NIH and protect their culture of support for basic medical sciences and the scientific ecosystem. The foundational research and technology development done at NIGMS and NIBIB underpins the creation of novel technologies and techniques that are crosscutting with applications across various diseases. It is crucial that they retain their long-term outlook and focus on fundamental research.

SIAM is pleased to see the proposed creation of NIH's new Office of Research Innovation, Validation, and Application (ORIVA) to capitalize on advances in data science and emerging technologies for human-based technologies. We encourage the agency to increase collaboration with the applied mathematics community for similar applications and hope that Congress will support this new office and appropriate sufficient funds to invest in new programs and infrastructure that will be required to dramatically scale up computational NIH efforts. Establishment of additional coordination and engagement between the applied mathematics and computational science community and the wide-ranging federal healthcare and biomedical research ecosystem across the Food and Drug Administration (FDA), NIH, and CDC, will improve the nation's preparedness, health systems, and drug development and approval pathways.

SIAM continues to be impressed by the progress ARPA-H has made in the last several years and looks forward to the continued growth of the agency. Congress should continue to ensure that ARPA-H must be inclusive of all relevant research communities, especially the applied mathematics and computational science community. The applied mathematics and computational science community has the expertise and capacity to address biomedical and health grand challenges, in various capacities such as industry, academia, and government. Congress should encourage partnerships with the applied mathematics and computational science community to create new technologies, platforms, and capabilities that can address many health challenges and rapidly transform new research into operational and clinical tools. Predictive and informed modeling, data analytics, machine learning, AI, high performance computing, and related technologies have the potential to transform biomedical research and healthcare, and Congress should encourage ARPA-H to prioritize these modern approaches to biomedical advances.

SIAM strongly supports the Center for Forecasting and Outbreak Analytics, which has been operating since 2022 within CDC to use forecasting modeling to predict infectious disease outbreaks. CFA's core functions of predicting emerging threats through advanced analytics, informing decision makers and communicating with the public about actions they can take to respond to these threats, and innovating new analytic approaches and technologies, are critical to ensuring an effective pandemic preparedness response regime. Since its establishment, the Center has received strong bipartisan support in appropriations and has developed new modeling technologies that are already improving public health preparedness, potentially saving millions of dollars in taxpayer funds. Congress should continue to support the CDC Center for Forecasting and Outbreak Analytics and provide $50 million for FY 2026.

Additionally, SIAM urges Congress to protect F&A rates from proposed 15 percent caps to institutions. Caps to F&A would deprive research institutions of their ability to conduct transformative, cutting-edge research and cripple our nation's research enterprise. We urge Congress to engage with stakeholders and the research community in a more deliberate process for any changes to F&A rates.

Conclusion

We would like to thank the Committee for its continued support of NIH, ARPA-H, and CDC which enables the research and education communities, including thousands of SIAM members, to carry out activities that strengthen the nation's ability to conduct transformative research, improve public health, and enhance both economic and national security. Congress needs to protect research from further cuts and provide HHS agencies with sustained growth to maintain our competitive edge in biomedical research. We ask that you provide robust support of these critical agencies in FY 2026 and put the United States on track to dramatically scale emerging technology investments as bipartisan majorities have emphasized are critical to our public health and competitiveness. We appreciate the opportunity to provide testimony to the Committee on behalf of SIAM.