

August 1, 2024

Rep. Diana DeGette  
2111 Rayburn House Office Building  
Washington, D.C. 20151

Rep. Larry Bucshon  
2313 Rayburn House Office Building  
Washington, D.C. 20151

## **RE: Request for information on the 21<sup>st</sup> Century Cures Initiative**

The American Society for Biochemistry and Molecular Biology is an international nonprofit scientific and educational organization that represents more than 13,000 students, researchers, educators and industry professionals. The ASBMB strongly advocates for strengthening the science, technology, engineering and mathematics (STEM) workforce; supporting sustainable funding for the American research enterprise; ensuring diversity, equity, accessibility and inclusion (DEAI) in STEM; and addressing emerging issues in the scientific enterprise.

The ASBMB appreciates the opportunity to respond to congressional leaders' request for information to ensure the goals of the 21<sup>st</sup> Century Cures Act and Cures 2.0 Act are most beneficial to patients and the healthcare system. Sustained funding for key federal science agencies, including the National Institutes of Health and National Science Foundation, supports scientists at all career stages who conduct biomedical research that improves and saves lives. Research at all levels — basic, applied, translational and clinical — is required to continue making advancements in diagnostic and treatment options for the benefit of a patient-centered healthcare system. The ASBMB offers a series of recommendations to bolster innovative research efforts and support mechanisms to enhance the scientific workforce.

### **1. Do the policies included in the Cures 2.0 that have advanced through legislation or executive action meet the needs that the original Cures 2.0 bill aimed to address?**

The ASBMB applauds policymakers for emphasizing the importance of investing in basic scientific research to better understand and treat diseases, such as cancer and Alzheimer's. The funding made available in the Cures legislation is key to spurring innovation, and we encourage policymakers to continue making those investments. In addition, we propose the following recommendation.

*Recommendation 1: Encourage federal agencies to engage with scientific societies to educate society members on the intricacies of the funding mechanisms, new and old, and make the information available for the broader scientific community.*

While the creation of ARPA-H was a bold step forward and can lead to extraordinary scientific breakthroughs, many researchers are still unclear of the funding mechanism process. The ASBMB recommends assigning a liaison within the NIH to engage in outreach webinars with scientific societies to highlight ARPA-H and other funded initiatives — Cancer Moonshot, BRAIN and precision medicine. Doing so would introduce new researchers, especially more junior investigators, to funding opportunities, help them determine if their research aligns with the funding mechanisms' goals, and offer points of contact. In addition, in the interest of transparency, the NIH should disseminate information on ARPA-H and the funded initiatives from the 21<sup>st</sup> Century Cures Act to the broader scientific community.

## **2. What elements might be missing that are essential for further progress?**

The ASBMB acknowledges policymakers' efforts to provide sustained funding for federal agencies amidst fiscal constraints. The U.S. research enterprise needs predictable, sustained and increased funding for federal agencies to continue producing new treatments and therapies, enabling U.S. global leadership, and fueling the American economic engine. The fluctuations in funding resources year to year are a challenge in developing consistent trajectories for multi-year projects and create artificial stops and starts in the NIH peer review and research process. We propose the following recommendations to further propel the U.S. research enterprise.

*Recommendation 2: Continue prioritizing basic scientific research and sustained, increased funding for basic research across key science agencies.*

Sustained and increased funding for key science agencies, such as the NIH and NSF, not only leads to extraordinary breakthroughs but also supports the research workforce. For example, in FY 2021, the NSF funded more grants than ever and reached the [highest number of individuals budgeted on successful research grants](#) (30,292 graduate students, 5,008 postdoctoral researchers and 44,564 personnel). This ultimately lays the foundation for a thriving STEM workforce, which is necessary for promoting scientific discovery and impacting society through science.

The NIH's budget funds basic research grants at higher rates than translational or clinical research grants. For example, in FY 2022, basic research projects accounted for about [54% of NIH funding](#).

Without key basic scientific research, [translational research would be impossible](#). This foundational support for basic research must be sustained to continue translating discoveries into clinical studies and, eventually, therapies and cures for patients. To prevent any interruptions to science agencies that support basic scientific research, the ASBMB urges policymakers to ensure that funding for translational research does not supersede funding for basic science research.

Allocations for the 21<sup>st</sup> Century Cures Act have funded important initiatives, such as precision medicine, BRAIN, Cancer Moonshot, regenerative medicine and the All of Us program. The ASBMB recommends NIH build upon these initiatives to sustain funding as a long-term investment.

*Recommendation 3: Federal agencies, such as the NIH, should focus on ensuring that research resources and data from the 21<sup>st</sup> Century Cures Act or other programs, are disseminated and accessible to the broader scientific community to spur new advances across biomedical research.*

In FY 2022, [research project grants were 69% of NIH's portfolio](#) (46,618 projects funded). It is not only important that the NIH improve data-storing methods for research but to also create spaces for meaningful collaborative exchanges. The ASBMB recommends NIH take an active role in creating chat rooms for grant recipients to share knowledge, exchange information, and work with one another. These interactive chat rooms can lay the groundwork for innovative collaborations within NIH and across federal agencies. In [FY 2022](#), the NIH and other Health and Human Services Department staff divisions reported 822 collaborative activities. These collaborative efforts are essential in transforming basic scientific and technical information into effective, knowledge-based approaches that advance the health and safety of the public.

### **3. What additional reforms, support mechanisms, or incentives are needed to enhance or improve the effectiveness of the steps already taken, including any structural reform to agencies, offices, or programs involved?**

The ASBMB applauds policymakers for emphasizing the importance of giving graduate students and postdocs greater financial stability through bills such as the [RESEARCHER Act](#).

The U.S. research enterprise relies on graduate students and postdoctoral scholars to carry out their institutions' research, however faculty members in recent years have struggled to [recruit and hire postdocs](#). The [same persistent concerns for postdocs](#) related to long training periods, low salaries, and lack of appropriate guidance for careers other than in the professoriate have contributed to the faculty's challenges in recruitment. Members of the scientific community have

discussed reform of the postdoctoral training model for more than a decade, yet few reforms or recommendations have been enacted.

The [NIH's working group](#) and the [National Postdoctoral Association](#) released reports on Dec. 2023 and March 2024 respectively, with recommendations to support the next generation of scientists, and we encourage policymakers to take heed of them. In addition, we propose the following recommendation.

*Recommendation 4: Incorporate provisions from the RESEARCHER Act to train and support the next generation of scientists.*

The ASBMB strongly urges policymakers to include provisions from the RESEARCHER Act such as directing the White House Office of Science and Technology Policy to develop a set of policy guidelines for federal research agencies to address the financial instability of graduate and postdoctoral researchers. The NIH is making strides to re-envision postdoc training with [NIH's advisory committee's report](#) and [revising the fellowship application](#) process to ensure a fair and equitable process for all applicants.

However, supporting the next generation of scientists requires financial support. Federal grants have not kept up with inflation and principal investigators have the extra burden of accounting for the [rising cost of conducting scientific research](#). The ASBMB recommends that policymakers consider supplement grants for investigators with existing grants to support the next generation of scientists and meet the increased cost of scientific research. These support mechanisms would further expand the aims of the parent grant, diversify the scientific workforce, and speed up the review process by focusing solely on detailing the research candidate's qualifications instead of a full grant proposal submission.