

April 4, 2022

The Honorable Jeff Merkley  
Chairman  
Senate Appropriations Subcommittee on  
Interior, Environment, and Related Agencies  
531 Hart Senate Office Building  
Washington, D.C. 20510

The Honorable Lisa Murkowski  
Ranking Member  
Senate Appropriations Subcommittee on  
Interior, environment, and Related Agencies  
522 Hart Senate Office Building  
Washington, DC 20510

Dear Chairman Merkley and Ranking Member Murkowski:

We, the undersigned leading academic and other research organizations and scientific societies, are writing to thank you for your support for the Environmental Protection Agency (EPA) Science and Technology (S&T) account. As you prepare the fiscal year (FY) 2023 Interior, Environment, and Related Agencies appropriations bill, we urge you to further increase your support for EPA S&T. Specifically, we recommend that you provide at least \$864 million for EPA S&T, of which \$50 million is requested for the Science to Achieve Results (STAR) Program. With this requested increase in funds, we also recommend that you take action to implement recommendations of the National Academies of Science, Engineering and Mathematics (NASEM) to enhance innovation within the STAR Program and to enable the EPA's Office of Research Development (ORD), who oversees EPA S&T, to contribute further to the training of the future environmental workforce.

Funding for EPA S&T has decreased dramatically from its peak of \$846 million in FY 2010 to \$750.2 million in FY 2022. Similarly, the Science to Achieve Results program (STAR) Program, which provides research grants to U.S.-based universities to augment EPA's internal S&T capacity to conduct research has also been under-funded in recent years with a reduction from its peak of \$138 million in FY 2012 to \$28.6 million for the last several fiscal years. The reduction in funds to the EPA S&T account over time has occurred despite the research it supports leading to significant positive benefits to human health and welfare, pollution control, and environmental sustainability for the last several decades.<sup>1</sup> As a testament to the success of EPA S&T, the NASEM has consistently praised ORD in advancing EPA's mission by spurring innovation; stimulating academic research; cultivating the next generation of environmental scientists; and developing and deploying novel technologies. Further, the research generated from the STAR program has brought technical expertise from outside the EPA to improve public health outcomes, reduce the cost of environmental regulatory compliance, and improve workforce development and research infrastructure.<sup>2</sup> When accounting for inflation as well as the growing demand on ORD, the current funding levels of the S&T account and on the STAR Program represent an even steeper decline.

We were encouraged that Congress provided a \$20.85 million increase for S&T in 2022, and that the FY 2021 omnibus encouraged EPA to revitalize STAR by exploring programmatic changes recommended by the NASEM in 2017. Still, funding for STAR was once again held flat from 2021 to 2022, limiting EPA's ability to implement these necessary changes. Further, we have not seen any policy or programmatic

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<sup>1</sup> National Research Council, "Science for Environmental Protection: The Road Ahead", 2012, available at <https://www.nap.edu/catalog/13510/science-for-environmental-protection-the-road-ahead>.

<sup>2</sup> National Academies of Science, Engineering, and Medicine, "A Review of the Environmental Protection Agency's Science to Achieve Results Research Program", 2017, available at <https://www.nap.edu/catalog/24757/a-review-of-the-environmental-protection-agencys-science-to-achieve-results-research-program>.

changes at the EPA with respect to the STAR. As such, within the overall amount \$864 million proposed for EPA S&T, we request that \$50 million be provided for STAR to build upon the directives included in the FY 2021 omnibus and accommodate the full implementation of the following NASEM priorities:

- **Implementation of a mechanism for accepting principal investigator (PI)-led proposals** – STAR currently solicits proposals through Requests for Application (RFAs) that are developed via an internal process. Topics are chosen based on the content of the Strategic Research Action Plans associated with each of the S&T programs as well as the needs of EPA’s intramural program. While this approach ensures that STAR investments align with agency priorities, NASEM found that it “may limit the creativity of the program.” In addition, this process has also resulted in a decline in STAR’s funding because its budget has been tied directly to the funding levels for the domain-specific programs within S&T. Consequently, fewer researchers are able to obtain funding through STAR, and novel and innovative ideas from outside the agency are discouraged. The model for unsolicited, PI-driven proposals is consistent with that of the Defense Advanced Research Projects Agency, which maintains an outlet through which researchers can submit proposals that do not necessarily conform to the narrower parameters of focused solicitations. This helps attract novel ideas that might otherwise go unnoticed by program managers but that still help the agency meet its mission requirements.
- **Reestablishment of STAR Graduate Fellowships** – Until it was terminated as part of the Obama Administration’s STEM education consolidation, the STAR Graduate Fellowship program served as a workforce pipeline for multidisciplinary researchers trained to address complex environmental challenges. Specifically, the program helped offset costs associated with obtaining an advanced degree in the environmental and environmental health sciences while exposing promising students to careers in environmental protection. The program was unique in this regard, a claim that NASEM validated when it found that analogous programs at the National Science Foundation and National Institutes of Health had not made up for the decline in federally supported environmental research fellows that materialized following the program’s elimination. In keeping with the NASEM recommendation, we request that Congress direct EPA to re-establish the STAR Graduate Fellowship program to meet workforce needs in environmental research and management.

We look forward to working with you further and hope to serve as a resource for you as the FY 2023 appropriations cycle progresses.

Sincerely,

American Geophysical Union  
American Institute of Biological Sciences  
American Society of Agronomy  
Association of Public and Land-grant Universities  
Boston University  
Brown University  
Carnegie Mellon University  
Crop Science Society of America  
Duke University  
Ecological Society of America  
Entomological Society of America  
Georgia Institute of Technology

Soil Science Society of America  
The University of Arizona  
The University of Houston  
University of California, Berkeley  
University of California, Davis  
University of California, Merced  
University of California, Riverside  
University of California System  
University of Cincinnati  
University of Colorado, Boulder  
University of New Hampshire  
University of Washington  
Yale University