

Nos. 25-1677, 25-2637

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, AFL-CIO, et
al.,

Plaintiffs-Appellees,

v.

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT, et al.,

Defendants-Appellants.

On Appeal from the United States District Court
for the Northern District of California
No. 3:25-cv-01780-WHA
Hon. William H. Alsup

**BRIEF OF *AMICI CURIAE* AMERICAN PHYSICAL SOCIETY,
AMERICAN ASTRONOMICAL SOCIETY, AMERICAN POLITICAL
SCIENCE ASSOCIATION, AMERICAN MATHEMATICAL SOCIETY,
ACA: THE STRUCTURAL SCIENCE SOCIETY, ECOLOGICAL SOCIETY
OF AMERICA, SOCIETY FOR INDUSTRIAL AND APPLIED
MATHEMATICS, AND SPIE IN SUPPORT OF PLAINTIFFS-APPELLEES
AND SUPPORTING AFFIRMANCE OF THE DISTRICT COURT
RULINGS**

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STATEMENT OF INTEREST OF *AMICI CURIAE*¹

The American Physical Society (“APS”), American Astronomical Society, American Political Science Association, American Mathematical Society, ACA: The Structural Science Society, Ecological Society of America, Society for Industrial and Applied Mathematics, and SPIE (collectively, “*amici*”) are nonprofit membership organizations working to advance scientific fields and foster a community dedicated to science and society. The members of these organizations include professional scientists, early-career scientists, science faculty, and science students (collectively, “STEM professionals”), many of whom previously held or currently hold positions at various federal departments and agencies, such as the National Science Foundation (“NSF”), National Institutes of Health, Food and Drug Administration, U.S. Department of Health and Human Services (“HHS”), National Institute of Standards and Technology, U.S. Department of Energy (“DoE”), National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and U.S. Department of Defense (collectively “federal science agencies”). Many of *amici*’s members have been directly affected by the Office of

¹ Pursuant to Fed. R. App. P. 29(a)(4)(E), no party’s counsel authored this brief in whole or in part, and no party or party’s counsel contributed money that was intended to fund preparing or submitting the brief. No person or entity other than *amici curiae* contributed money that was intended to fund preparing or submitting this brief. Additionally, pursuant to Fed. R. App. P. 29(a)(2) and Circuit Rule 29-2(a), the parties do not oppose the filing of this *amici curiae* brief.

Personnel and Management's ("OPM") directives to federal agencies to evaluate the employment of probationary employees, which resulted in the abrupt termination by those agencies of the jobs of thousands of federal employees. Accordingly, *amici* file this brief on behalf of their members who have been directly affected by the widespread terminations.

INTRODUCTION

OPM’s directives to federal agencies instructed them to identify all probationary employees, report a list of such employees to OPM, and “promptly determine whether those employees should be retained at the agency.”² In the wake of OPM’s initial directive, issued on January 20, 2025, federal agencies indiscriminately terminated the jobs of thousands of federal employees with little to no advance notice. Alarming reports indicate that in February, thousands of employees were fired from regulatory and science-funding agencies; many of those employees were program officers and subject-matter experts who managed various research grants and made funding decisions for those grants (although some were later rehired).³ Although the federal government’s purported rationale for these and similar drastic measures is that the terminations will “enhance accountability, reduce waste, . . . promote innovation . . . [and] restore efficiency,” there is no compelling

² See Off. of Personnel Mgmt., *Guidance on Probationary Periods, Administrative Leave and Details* (2025), <https://www.opm.gov/media/yh3bv2fs/guidance-on-probationary-periods-administrative-leave-and-details-1-20-2025-final.pdf>.

³ See Jonathan Lambert, *National Science Foundation Fires Roughly 10% of Its Workforce*, NPR (Feb. 18, 2025), <https://www.npr.org/2025/02/18/nx-s1-5301049/national-science-foundation-fires-roughly-10-of-its-workforce>. Although there are reports of some NSF employees being rehired after this Court’s temporary restraining order, many have not been. See Jeffrey Mervis, *NSF Brings Back 84 Fired Workers After Judge Blocks White House–Ordered Dismissals*, Science (Mar. 3, 2025), <https://www.science.org/content/article/nsf-brings-back-84-fired-workers-after-judge-blocks-white-house-ordered-dismissals> (explaining that while 84 employees will be going back to work at NSF, 86 fired workers will not).

evidence that these terminations advance any of those goals.⁴ Quite the opposite: many of the federal science agencies are already viewed as among the most efficient agencies in the federal government in part because they operate with low administrative costs, maintain a strategic focus on their mission objectives, and ensure full transparency in their operations.⁵

Moreover, contrary to the intended goals of this unprecedented federal workforce reduction, the loss of talented STEM professionals from federal science agencies will adversely affect the quality and quantity of the trained technical workforce and stifle the innovations that are crucial in maintaining the U.S.'s scientific leadership, economy, and national security. *Amici* therefore support Plaintiffs-Appellees' request that this Court affirm the injunctions entered by the district court below.

⁴ White House, *Fact Sheet: President Donald J. Trump Reduces the Federal Bureaucracy* (Feb. 19, 2025), <https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-reduces-the-federal-bureaucracy>; *see also* White House, *Fact Sheet: President Donald J. Trump Works to Remake America's Federal Workforce* (Feb. 11, 2025), <https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-works-to-remake-americas-federal-workforce>.

⁵ *Cf.* Philip Rossetti & Sejla Avdic, *How to Get the Most Out of the Government's Research Spending*, Am. Action Forum (Nov. 16, 2018), <https://www.americanactionforum.org/research/how-to-get-the-most-out-of-the-governments-research-spending> (describing that DoE has a “high productivity of innovation” and that “energy programs . . . are currently among the most efficient”).

ARGUMENT

I. There Is No Evidence That the Terminations at Federal Science Agencies Increase Government Efficiency or Reduce Any Waste.

President Trump has touted his efforts to “shrink[] the federal government” in order to “restore efficiency” and “reduce waste” in the government.⁶ *Amici* recognize that “operational efficiency is undoubtedly a vital government interest,” but there is no indication or reason to believe that maintaining the employment of federal scientists and other STEM professionals was “so threatening to the efficiency of the entire federal service as to render” OPM’s directive a “reasonable response” to any legitimate concerns about efficiency. *United States v. Nat’l Treasury Emps. Union*, 513 U.S. 454, 473 (1995). In fact, all indications are to the contrary—broadscale elimination of federally employed scientists will undermine efficiency and create, rather than reduce, waste.

“Operational efficiency” is defined as “[t]he capability of an enterprise to deliver products or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its products, service, and support.” *Operational Efficiency*, Black’s Law Dictionary (12th ed. 2024); *cf. also United States v. Martinez-Guerrero*, 987 F.2d 618, 621 (9th Cir. 1993) (Ferguson, J., concurring) (“A determination of efficiency, by definition, requires a preliminary

⁶ *Supra*, note 4.

determination of the relevant goal to be achieved without waste.”). “Waste,” accordingly, is defined as the “thoughtless or careless expenditure, mismanagement, or abuse of resources to the detriment (or potential detriment) of the U.S. government.”⁷

With these definitions in mind, it is apparent that federal science agencies already operate at high levels of efficiency and are diligent in managing resources to limit any waste. For example, NSF is an “efficient, effective, agile and forward-looking organization” that “continually reexamines its organizational structure and processes to make sure that they adapt and scale,” ensuring “enhance[d] performance of NSF’s mission.”⁸ To this end, NSF’s strategic goals and objectives include various initiatives aimed at improving efficiency by, for example, “reducing administrative burden,” incorporating “new technologies,” and “assessing performance and impact.”⁹ NSF’s financial performance underscores its success in achieving those very goals: NSF spends only 5% of its total budget on administrative costs like operations and award management, with the bulk of its

⁷ Off. of Inspector General, USAID, *What Is Considered Fraud, Waste, or Abuse?* (Apr. 16, 2018), <https://oig.usaid.gov/node/221>; see also U.S. Gov’t Accountability Off., *Fraud, Waste, Abuse, and Mismanagement* (2020), <https://www.gao.gov/assets/680/676651.pdf> (defining “waste” as “squandering money or resources, even if not explicitly illegal” (capitalization altered)).

⁸ U.S. Nat’l Science Found., *2022-2026 Strategic Plan* at 45, 49 (2022), <https://nsf.gov-resources.nsf.gov/pubs/2022/nsf22068/nsf22068.pdf>.

⁹ *Id.* at 45–47 (capitalization altered).

funding (79%) spent on critical science work such as “early-stage research and the development of a future-focused science and engineering workforce.”¹⁰

Central to NSF’s success is its ability to efficiently identify promising research proposals in the specialized scientific and technical areas covered by the agency. Over the last several decades, NSF has developed a robust peer-review culture and processes to evaluate research proposals that leverage sizeable volunteer support. Those streamlined processes help NSF maintain low administrative costs: In fiscal year 2024 alone, almost 32,000 members of the STEM community voluntarily participated in the NSF merit-review process (which is used to make funding decisions), allowing NSF to evaluate more than 40,000 proposals and support more than 11,000 new awards.¹¹ And in fiscal year 2022, unpaid volunteers wrote more than 169,000 reviews.¹² That robust merit-review process helps ensure that resources are allocated efficiently to the most promising areas of research and innovation.

¹⁰ U.S. Nat’l Science Found., *FY2024 Agency Financial Support* at 12 (2025), <https://nsf-gov-resources.nsf.gov/pubs/2025/nsf25002/pdf/nsf25002.pdf>.

¹¹ *See id.*

¹² U.S. Nat’l Science Found., *Merit Review Process Fiscal Year 2021* at 10 (June 2023), https://nsf-gov-resources.nsf.gov/nsb/publications/2022/merit_review/nsb202314.pdf.

Similarly, in fiscal year 2024, the DoE Office of Science, which supports research in the physical sciences, supported 835 federal full-time employees at a cost of \$236 million to execute a budget of more than \$8.1 billion¹³ across 50 states, more than 300 universities, and 16 national laboratories.¹⁴ In so doing, the DoE Office of Science directly supported more than 20,000 researchers and maintained world-leading facilities that provided access to nearly 40,000 scientists from more than 300 institutions all while maintaining a 3% operational cost.¹⁵ The ability to maintain a 3% operational cost while supporting such a vast workforce is viewed in business as a display of outstanding efficiency, vastly exceeding the corporate mean.¹⁶

In the face of this display of efficiency, the government provides no contrary evidence that NSF, the DoE Office of Science, or other federal science agencies are inefficient or that mass terminations, particularly of probationary employees, reduce any government waste. While probationary employees are often relatively new additions to the workforce whose probationary status allows agencies to ensure their

¹³ U.S. Dep't of Energy, *FY 2025 Congressional Justification* at 1, 452 (Mar. 2024), <https://www.energy.gov/sites/default/files/2024-03/doe-fy-2025-budget-vol-5-v2.pdf>.

¹⁴ U.S. Dep't of Energy, *Office of Science by the Numbers* <https://www.energy.gov/science/office-science-numbers> (last visited June 26, 2025).

¹⁵ *See id.*

¹⁶ David Luther, *Top Efficiency Ratios: Operational, Asset, Inventory and More*, Oracle NetSuite (Oct. 20, 2022), <https://www.netsuite.com/portal/resource/articles/accounting/efficiency-ratios.shtml>.

“fitness for the job,”¹⁷ others are seasoned employees who have recently been promoted. And in neither case is there anything about the probationary status on its own that suggests that probationary employees would be any less efficient than other employees. Using a broad-based criterion (like probationary status) that has no connection to any metric of efficiency or waste to determine whom to fire will have the predictable effect of creating waste and introducing inefficiencies.

II. There Is No Evidence That the Terminations at Federal Science Agencies Reduce Any Abuse of Government Resources or Any Fraud.

Amici similarly acknowledge that the government’s interest in “federal officers not misus[ing] or appear[ing] to misuse power . . . is undeniably powerful”; but here, too, the government “cites no evidence of misconduct” or fraud to justify the sweeping terminations. *Nat’l Treasury Emps. Union*, 513 U.S. at 472. “Fraud” commonly refers to “the wrongful or criminal deception intended to result in financial or personal gain.”¹⁸ Agencies routinely use mechanisms like annual audits,

¹⁷ Off. of Personnel Mgmt., *Practical Tips for Supervisors of Probationers*, <https://www.opm.gov/policy-data-oversight/hiring-information/practical-tips-for-supervisors-of-probationers> (last visited June 26, 2025).

¹⁸ Off. of Inspector General, *supra*, note 7; *see also Fraud*, Black’s Law Dictionary (12th ed. 2024) (defining fraud as “any kind of artifice by which another is deceived” (emphasis and internal quotation marks omitted) (quoting John Willard, *A Treatise on Equity Jurisprudence* 147 (Platt Potter ed., 1879))).

which can reveal inconsistencies or other material missteps in financial statements, to help detect fraud at the organizational level.¹⁹

NSF's Office of Audits, Inspections, and Evaluations provides "independent and objective assessments of NSF's programs and operations and examines grants, contracts, and cooperative agreements funded by NSF."²⁰ Moreover, independent external auditors conduct thorough audits of NSF, and the most recent audit "identified no material weaknesses" and "no reportable instances of noncompliance with provisions of laws, regulations, contracts, and grant agreements."²¹ In other words, the audit found no evidence of fraud. These results are consistent with NSF's distinguished record of clean audits for twenty-six consecutive years.²² And NSF is not alone in that achievement as other federal science agencies, like HHS, have

¹⁹ See U.S. Sec. & Exch. Comm'n, *The Auditor's Responsibility for Fraud Detection* (Oct. 11, 2022), <https://www.sec.gov/newsroom/speeches-statements/munter-statement-fraud-detection-101122>.

²⁰ U.S. Nat'l Science Found., *Fiscal Year 2025 Oversight Plan* at 1 (Nov. 21, 2024), <https://oig.nsf.gov/sites/default/files/reports/2024-11/FY%25202025%2520Oversight%2520Plan.pdf>.

²¹ U.S. Nat'l Science Found., *Audit of the U.S. National Science Foundation's Fiscal Years 2024 and 2023 Financial Statements* at 2, 4 (Nov. 13, 2024), <https://oig.nsf.gov/sites/default/files/reports/2024-11/25-02-003%2520-%25202024%2520NSF%2520Financial%2520Statement%2520Audit%2520-%2520public.pdf>.

²² U.S. Nat'l Science Found., *FY 2023 Performance and Financial Highlights* at 2 (2024), <https://nsf-gov-resources.nsf.gov/pubs/2024/nsf24003/nsf24003.pdf>.

similarly maintained a clean audit record for similar lengths of time.²³ Similarly, independent external auditors conduct thorough audits of DoE, and for eighteen consecutive years, the audits have not identified any concerns with the Office of Science.²⁴

There is also no indication that the abrupt terminations at issue were designed to reduce or will have the effect of reducing any abuse of government resources. The U.S. Government Accountability Office defines “abuse” as “behaving improperly or unreasonably, or misusing one’s position or authority.”²⁵ Acting contrary to an organization’s mission, for example, can be indicative of an abuse of resources and authority. *Cf.* 41 U.S.C. § 4712(g)(1) (defining “abuse of authority” as “an arbitrary and capricious exercise of authority that is inconsistent with the mission of the executive agency concerned”); *United States v. Villarreal*, 725 F. App’x 515, 517 (9th Cir. 2018) (noting that acting “directly contrary to the mission of” an organization may indicate “abuse of . . . official positions”).

²³ U.S. Dep’t of Health and Human Servs., *Fiscal Year 2024 Agency Financial Report* at 2 (Nov. 14, 2024), <https://www.hhs.gov/sites/default/files/fy-2024-hhs-agency-financial-report.pdf>.

²⁴ U.S. Dep’t of Energy, *Audits & Inspections*, <https://www.energy.gov/ig/audits-inspections> (last visited June 26, 2025) (Audits are available through the DoE Office of the Inspector General).

²⁵ U.S. Gov’t Accountability Off., *supra* note 7 (capitalization altered).

NSF’s mission is to “promote[] the progress of science by investing in research to expand knowledge in science, engineering and education,” and it accordingly “invests in actions that increase the capacity of the U.S. to conduct and exploit such research.”²⁶ No reasons exist to believe that NSF has strayed from this important mission or that the fired employees abused their authority or government resources in any way. The lack of such evidence is hardly surprising as NSF has several mechanisms in place to guide the agency’s systematic progress towards its mission while ensuring meaningful independent oversight of its activities. To begin, NSF engages in robust strategic planning every five years in collaboration with the broader STEM community and the National Science Board (“NSB”), which independently oversees NSF and provides policy direction to the agency.²⁷ In addition to NSB’s oversight, various Congressional committees also independently oversee NSF’s activities.²⁸ And to ensure adherence to the long-term objectives set out in its strategic plans, NSF publishes performance reports on an annual basis, like

²⁶ See U.S. Nat’l Science Found., *2022-2026 Strategic Plan*, *supra* note 8, at 6.

²⁷ See generally *id.*

²⁸ See, e.g., H. Comm. on Science, Space & Tech., *Research and Technology*, <https://science.house.gov/subcommittee-research-technology> (last visited June 26, 2025) (explaining the subcommittee’s oversight over some federal science agencies, including NSF).

many of the other federal science agencies.²⁹ Both the strategic plans and annual performance reports—which detail NSF’s activities, awards, and appropriated funds—are publicly available to ensure full transparency with the American public.

At DoE, the Office of Science’s mission is to “deliver scientific discoveries and major scientific tools to transform our understanding of nature and advance the energy, economic, and national security of the United States.”³⁰ As with NSF, there is no evidence that the Office of Science has strayed from this important mission or that the fired employees abused their authority or government resources in any way. That is expected, given that the Office of Science also has several mechanisms in place guiding the agency’s systematic progress on its mission while ensuring meaningful independent oversight of its activities. As part of the DoE strategic plan conducted every five years, each of its six offices (including the Office of Science) creates a robust plan that incorporates strong input from the community and utilizes a system of performance measurement and assessment.³¹ In addition, until recent

²⁹ See, e.g., U.S. Nat’l Science Found., *FY 2024 Annual Performance Report* (2025), <https://nsf.gov-resources.nsf.gov/files/nsf25003.pdf>; U.S. Dep’t of Health and Human Servs., *FY 2025 Annual Performance Plan and Report* (2024), <https://www.hhs.gov/sites/default/files/fy2025-performance-plan.pdf>.

³⁰ U.S. Dep’t of Energy, *Mission*, <https://www.energy.gov/science/mission> (last visited June 26, 2025).

³¹ See generally U.S. Dep’t of Energy, *Chapter 5 Performance Measurement and Assessment* (2000), https://www.energy.gov/sites/prod/files/70.7_ch5_Performance_Measurement_and_Assessment.pdf.

months, six advisory committees “provide[d] valuable, independent advice to the Office of Science . . . regarding complex scientific and technical issues influencing the planning, management, and implementation of research programs.”³² Separately, the Office of Project Assessment “provides independent advice to the Director of the Office of Science . . . relating to those activities essential to constructing and operating major research facilities.”³³ That office also “provides professional management and staff support regarding these functions to [the Office of Science’s] program offices.”³⁴ The Office of Science also makes publicly available annual statistics on the users of research facilities, as well as all research awards to ensure full transparency with the American public.³⁵

Far from showing any indications of abuse, NSF and the Office of Science, like many science agencies, employ an elaborate combination of transparency, detailed strategic plans, broad STEM community participation, and robust

³² U.S. Dep’t of Energy, *Federal Advisory Committees*, <https://science.osti.gov/About/Federal-Advisory-Committees> (last visited June 26, 2025).

³³ U.S. Dep’t of Energy, *Office of Project Assessment (OPA)*, <https://www.energy.gov/science/office-project-assessment-opa> (last visited June 26, 2025).

³⁴ *Id.*

³⁵ See, e.g., U.S. Dep’t of Energy, *Office of Science User Facilities*, https://www.energy.gov/science/office-science-user-facilities?nrg_redirect=332850 (last visited June 26, 2025); U.S. Dep’t of Energy, *Office of Science Awards*, <https://www.energy.gov/science/office-science-awards> (last visited June 26, 2025).

independent oversight to ensure that they act in accordance with their missions. There is therefore no reason to believe that the terminations of probationary employees' jobs, particularly at the federal science agencies, will reduce any fraud or abuse of government resources or authority.

III. If Not Enjoined, the Terminations at Federal Science Agencies Will Harm the United States's Scientific Dominance, Innovation, and Economic Competitiveness and Will Significantly Damage the Public Interest.

Recognizing the importance of maintaining the nation's scientific leadership, APS has long called on the federal government to "[p]rioritize agencies that support physical sciences" because "[n]ot investing in [research and development] today weakens our economic competitiveness and national security, creating both financial and workforce deficits with long-term repercussions."³⁶ In particular, APS has raised the alarm with the federal government about the growing STEM workforce crisis because the government "plays an essential role in creating America's STEM workforce" to help avert any such crisis.³⁷ Thus, *amici's* support for preliminary relief preventing the terminations at federal science agencies arises from their concern that those terminations threaten the U.S.'s global scientific leadership and economic competitiveness, as evident through the examples discussed above, while

³⁶ Am. Physical Soc'y, *Defending Our Future: Preventing a U.S. Science Recession* (2025), <https://cvd.aps.org/img/defending-our-future.pdf>.

³⁷ *Id.*

also contributing to a potential workforce crisis by damaging the careers of STEM professionals serving the public.

These harmful effects spread far beyond the scientists and other STEM professionals who have been fired. Among other things, these terminations hinder efficiency and innovation, as organizations that downsize their workforce “lack resources” and “may not be able to afford experimenting with new ideas and develop new technologies . . . or take risks on innovative projects.”³⁸ Moreover, “[a]mong surviving employees, downsizing creates a high level of stress, along with poor morale and even guilt,”³⁹ often described as “survivor’s remorse.” This demoralizing effect is typically observed in remaining employees because downsizing forces them to take on additional workload and increases their own “expectation of lay-off[s] in future rounds of downsizing.”⁴⁰ In other words, when already efficient organizations with streamlined processes like the federal science

³⁸ Boumediene Ramdani et al., *The Effect of Downsizing on Innovation Outputs: The Role of Resource Slack and Constraints*, 46 Austl. J. Mgmt. 346, 349 (2021).

³⁹ Bahaudin G. Mujtaba, *Workplace Management Lessons on Employee Recruitment Challenges, Furloughs, and Layoffs During the Covid-19 Pandemic*, J. Hum. Res. Sustainability Stud. 13, 26 (2022).

⁴⁰ Ramdani, *supra* note 38, at 349.

agencies are forced to reduce their workforce, the remaining employees experience diminished productivity and burnout, risking the mission of the organization.⁴¹

The indiscriminate and abrupt nature of the terminations at issue here makes it more difficult for those federal science agencies to later attract competitive talent. Given the way in which the agencies implemented these terminations, the agencies will take a reputational hit, and fired employees may be unlikely to return, jeopardizing the agencies' abilities to secure talent in the future.⁴² Those consequences are particularly damaging for the federal science agencies that rely on a specialized and highly skilled science and technology talent pool. Accordingly, widespread terminations without just cause elicit punitive reactions from both remaining employees and prospective candidates.

The United States's leadership in science, technology, and innovation depends on the nation's ability to educate, recruit, *and* retain the best and brightest. The pace of scientific discovery and the translation of those discoveries into usable

⁴¹ See Mujtaba, *supra* note 39, at 18, 21, 23 (explaining that downsizing can severely damage the work ethic of remaining employees and overall company commitment).

⁴² Cf. *id.* at 22 (“Sadly, due to mistakes made during the layoffs, many employees in 2021 and early 2022 are not returning to the same firms where they worked prior to the pandemic.”); Bahaudin G. Mujtaba & Tipakorn Senathip, *Layoffs and Downsizing Implications for the Leadership Role of Human Resources*, J. Serv. Sci. Mgmt. 209, 216 (2020) (“Unfortunately, many companies seem to terminate employees indiscriminately or based on higher salary levels, and as a result, face the consequences of severely weakening their skilled talent pool.”).

technologies has greatly accelerated in the past decades, resulting in a highly competitive world where nations are now challenging American leadership in science, technology, and innovation. To remain competitive, the “U.S. must be a STEM talent powerhouse” and federal science agencies must accordingly continue to capitalize on three key advantages: (1) being a destination of choice for the best and brightest scientists and other STEM professionals to work, (2) building a robust STEM education pipeline in all regions of the country, and (3) providing an environment that encourages and inspires innovation.⁴³ Unfortunately, the Executive Branch’s broad-brush termination drive—which makes no effort to actually target waste, fraud, or abuse—has resulted in the firing of many employees at federal science agencies. Those firings will erode all three of those key advantages by reducing the skilled scientific workforce, overwhelming the bandwidth of existing employees, and risking the ability to secure competitive talent in the future.

CONCLUSION

No evidence even suggests that the abrupt terminations at federal science agencies increase government efficiency or reduce waste, fraud, and abuse, the government’s putative goals. Many of the federal science agencies have strong records of efficiency and adherence to their missions, but the terminations at these agencies jeopardize America’s global scientific leadership, risking innovation and

⁴³ U.S. Nat’l Science Found., *2022-2026 Strategic Plan*, *supra* note 8, at 19.

potentially diminishing the STEM talent pool. *Amici* support Plaintiffs-Appellees' efforts to reverse these terminations, to restore the employment of fired federal employees, and to preliminarily enjoin Defendants from engaging in any further broad terminations of probationary and other federal employees. *Amici* therefore support affirming the preliminary injunctions issued by the district court.

Respectfully submitted,

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**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

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