

ADVANCING AMERICA'S AI ACTION PLAN

HEARING BEFORE THE SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY OF THE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY OF THE HOUSE OF REPRESENTATIVES ONE HUNDRED NINETEENTH CONGRESS

SECOND SESSION

JANUARY 14, 2026

Serial No. 119-24

Printed for the use of the Committee on Science, Space, and Technology



Available via the World Wide Web: <http://science.house.gov>

U.S. GOVERNMENT PUBLISHING OFFICE

62-455PDF

WASHINGTON : 2026

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

HON. BRIAN BABIN, Texas, *Chairman*

RANDY WEBER, Texas	ZOE LOFGREN, California, <i>Ranking Member</i>
JIM BAIRD, Indiana	SUZANNE BONAMICI, Oregon
DANIEL WEBSTER, Florida	HALEY STEVENS, Michigan
JAY OBERNOLTE, California	DEBORAH ROSS, North Carolina
CHUCK FLEISCHMANN, Tennessee	ANDREA SALINAS, Oregon
DARRELL ISSA, California	VALERIE FOUSHEE, North Carolina
CLAUDIA TENNEY, New York	EMILIA SYKES, Ohio
SCOTT FRANKLIN, Florida	GABE AMO, Rhode Island
MAX MILLER, Ohio	SUHAS SUBRAMANYAM, Virginia
RICH MCCORMICK, Georgia	LUZ RIVAS, California
MIKE COLLINS, Georgia	SARAH MCBRIDE, Delaware
VINCE FONG, California	LAURA GILLEN, New York
DAVID ROUZER, North Carolina	GEORGE WHITESIDES, California,
KEITH SELF, Texas	<i>Vice-Ranking Member</i>
PAT HARRIGAN, North Carolina	LAURA FRIEDMAN, California
SHERI BIGGS, South Carolina	APRIL McCLAIN DELANEY, Maryland
JEFF HURD, Colorado	JOSH RILEY, New York
MIKE HARIDOPOLOS, Florida	BILL FOSTER, Illinois
MIKE KENNEDY, Utah	DON BEYER, Virginia
NICK BEGICH, Alaska	
MATT VAN EPPS, Tennessee	

SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY

HON. JAY OBERNOLTE, California, *Chairman*

JIM BAIRD, Indiana	HALEY STEVENS, Michigan,
DARRELL ISSA, California	<i>Ranking Member</i>
VINCE FONG, California	SUHAS SUBRAMANYAM, Virginia
DAVID ROUZER, North Carolina	LUZ RIVAS, California
SHERI BIGGS, South Carolina	SARAH MCBRIDE, Delaware
MIKE KENNEDY, Utah	APRIL McCLAIN DELANEY, Maryland

C O N T E N T S

January 14, 2026

	Page
Hearing Charter	2
Opening Statements	
Statement by Representative Jay Obernolte, Chairman, Subcommittee on Research and Technology, Committee on Science, Space, and Technology, U.S. House of Representatives	9
Written Statement	10
Statement by Representative Haley Stevens, Ranking Member, Subcommittee on Research and Technology, Committee on Science, Space, and Technology, U.S. House of Representatives	11
Written Statement	12
Statement by Representative Brian Babin, Chairman, Committee on Science, Space, and Technology, U.S. House of Representatives	13
Written Statement	14
Statement by Representative Zoe Lofgren, Ranking Member, Committee on Science, Space, and Technology, U.S. House of Representatives	15
Written Statement	16
Witnesses:	
Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy	
Oral Statement	18
Written Statement	20
Discussion	24
Appendix I: Answers to Post-Hearing Questions	
Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy	64
Appendix II: Additional Material for the Record	
Documents submitted by Representative Jay Obernolte, Chairman, Subcommittee on Research and Technology, Committee on Science, Space, and Technology, U.S. House of Representatives	
Letter dated Dec. 26, 2025, from Phyllis A. Arthur, EVP & Head, Healthcare Policies and Programs, Biotechnology Innovation Organization, to Stacy Murphy, Deputy Chief Operations Officer/Security Officer, Office of Science and Technology Policy	74
Statement dated Jan. 14, 2026, from Kinsey Fabrizio, President, and Gary Shapiro, Executive Chair and CEO, Consumer Technology Association	88
Letter dated Jan. 14, 2026, from Paul Lekas, Executive Vice President, Global Public Policy & Government Affairs, Software & Information Industry Association, to the Honorable Brian Babin (R-TX), Chairman, House Committee on Science, Space, and Technology, et al.	90
Letter dated Nov. 25, 2025, submitted by Representative Zoe Lofgren, Ranking Member, Committee on Science, Space, and Technology, U.S. House of Representatives, from the National Association of Attorneys General to the Honorable Mike Johnson, Speaker, U.S. House of Representatives, et al.	93

ADVANCING AMERICA'S AI ACTION PLAN

WEDNESDAY, JANUARY 14, 2026

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Subcommittee met, pursuant to notice, at 10 a.m., in room 2318, Rayburn House Office Building, Hon. Jay Obernolte [Chairman of the Subcommittee] presiding.



RESEARCH & TECHNOLOGY SUBCOMMITTEE

HEARING CHARTER

“Advancing America’s AI Action Plan”

Wednesday, January 14, 2026

10:00 a.m.

2318 Rayburn House Office Building

Purpose

The purpose of the hearing is to examine President Trump’s artificial intelligence (AI) strategy, "Winning the Race: America’s AI Action Plan." This hearing will help inform future legislative actions that the Committee will consider to reauthorize the National AI Initiative Act and promote U.S. innovation and leadership in the field of AI.

Witness

- **Hon. Michael Kratsios**, Director, White House Office of Science and Technology Policy

Overarching Questions

- What are the most important policy recommendations in the AI Action Plan within the Science, Space, and Technology Committee’s jurisdiction?
- What challenges may exist in the implementation of those recommendations?
- How can Congress support the implementation of the AI Action Plan?
- What legislative initiatives should Congress advance that would be complementary to the AI Action Plan that were not discussed?
- How is OSTP coordinating with federal agencies on the implementation of the AI Action plan?

Background

On July 23, 2025, the White House unveiled “Winning the AI Race: America’s AI Action Plan,” structured around three pillars to advance American dominance in AI: innovation, infrastructure, and international diplomacy and security.¹ The AI Action Plan was released in response to President Trump’s January executive order titled, “Removing Barriers to American Leadership in Artificial Intelligence,” and incorporates the feedback from more than 10,000 public comments.^{2,3}

The White House Office of Science and Technology Policy (OSTP) led the development of the plan and will oversee its implementation as part of the nation’s broader science and technology policy agenda.⁴ OSTP Director Michael Kratsios, confirmed on March 25, 2025, previously served as the Deputy Assistant to the President for Technology Policy, U.S. Chief Technology Officer (CTO), and Acting Under Secretary of Defense for Research and Engineering during President Trump’s first term.^{5,6}

Separately, in December 2024, the House AI Task Force, co-led by Rep. Jay Obernolte (R-CA) and Rep. Ted Lieu (D-CA), released a report outlining guiding principles for AI policy. The report included 66 key findings and 89 recommendations, many of which align with the AI Action Plan, such as expanding access to computing power for researchers, investing in K-12 AI education, and advancing AI evaluations.⁷

The National Artificial Intelligence Initiative Act of 2020

The National AI Initiative Act of 2020 (NAIIA), led by the House Science, Space, and Technology (SST) Committee, became law in January 2021 as part of the National Defense Authorization Act for Fiscal Year 2021.^{8,9} The law directs key agencies under the Committee’s

¹ White House Unveils America’s AI Action Plan, THE WHITE HOUSE (July 2025),

<https://www.whitehouse.gov/articles/2025/07/white-house-unveils-americas-ai-action-plan/>.

² Exec. Order No. 14,179, 90 Fed. Reg. (Jan. 23, 2025) (Removing Barriers to American Leadership in Artificial Intelligence), <https://www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/>.

³ American Public Submits Over 10,000 Comments on White House’s AI Action Plan, THE WHITE HOUSE (Apr. 2025), <https://www.whitehouse.gov/articles/2025/04/american-public-submits-over-10000-comments-on-white-houses-ai-action-plan/>.

⁴ Office of Science and Technology Policy, THE WHITE HOUSE, <https://www.whitehouse.gov/ostp/>.

⁵ Roll Call Vote 119th Congress - 1st Session, Vote No. 139 (Mar. 25, 2025) (Confirmation: Michael Kratsios as Director of the Office of Science and Technology Policy), https://www.senate.gov/legislative/LIS/roll_call_votes/vote1191/vote_119_1_00139.htm.

⁶ Michael J.K. Kratsios, U.S. DEPT OF WAR, <https://www.war.gov/About/Biographies/Biography/Article/2279091/michael-jk-kratsios/>.

⁷ House Bipartisan Task Force on Artificial Intelligence Delivers Report, H. COMM. ON SCI., SPACE, & TECH. (Dec. 2024), <https://science.house.gov/2024/12/house-bipartisan-task-force-on-artificial-intelligence-delivers-report>.

⁸ H.R. 6216, the National Artificial Intelligence Initiative Act of 2020, H. COMM. ON SCI., SPACE, & TECH.

(Dec. 2020), <https://science.house.gov/2020/12/hr-6216-national-artificial-intelligence-initiative-act-2020>.

⁹ William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283, 134 Stat. 3388 (2021), <https://www.congress.gov/116/plaws/publ283/PLAW-116publ283.pdf>.

jurisdiction to support AI research and development, many of which also received significant policy recommendations in the AI Action Plan.¹⁰

Relevant SST Agencies

OSTP: The NAIIA tasked OSTP with coordinating the National AI Initiative to support continued U.S. leadership in AI research and development. OSTP also coordinated the White House AI Action Plan.

The National Science Foundation (NSF): The NAIIA directed the NSF to fund AI research and education and to establish a task force exploring the feasibility of a National AI Research Resource (NAIRR) Pilot. The NAIRR Pilot is intended to expand access to data and computing power (compute), such as semiconductors specialized for training or using AI and remote access to them. NSF launched the NAIRR Pilot in 2024, providing researchers and educators with compute and datasets to develop their own AI experiments.¹¹

The National Institute of Standards and Technology (NIST): Part of the Department of Commerce (DOC), NIST develops AI guidance and frameworks for stakeholders. Under the NAIIA, NIST was tasked with creating the AI Risk Management Framework, a voluntary framework designed to help organizations manage the risks associated with AI systems.

Center for AI Standards and Innovation (CAISI): CAISI, established within NIST, serves as a hub for AI technical expertise, and it tests and evaluates the most advanced American and foreign AI models.¹² CAISI was initially established as the AI Safety Institute by the Biden Administration in 2023.¹³ In June 2025, Commerce Secretary Howard Lutnick restructured the institute and its responsibilities, renaming it CAISI.

Secretary Lutnick tasked CAISI with the following: (1) serving as the industry's primary government point of contact for AI testing and research; (2) conducting unclassified evaluations of AI capabilities and AI national security risks such as cybersecurity, biosecurity, and chemical weapons; (3) leading evaluations of U.S. and adversary AI systems; (4) coordinating with other federal agencies to develop evaluation methods and conduct evaluations and assessments; (5) establishing voluntary agreements with private sector AI companies; and (6) working with NIST to develop guidelines and best practices for AI systems and ensure U.S. dominance of international AI standards.

¹⁰ Winning the Race: America's AI Action Plan, THE WHITE HOUSE (July 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>.

¹¹ National Artificial Intelligence Research Resource Pilot, NSF, <https://www.nsf.gov/focus-areas/ai/nairr>.

¹² Howard Lutnick, Statement from U.S. Secretary of Commerce Howard Lutnick on Transforming the U.S. AI Safety Institute into the Pro-Innovation, Pro-Science U.S. Center for AI Standards and Innovation, DOC (June 2025), <https://www.commerce.gov/news/press-releases/2025/06/statement-us-secretary-commerce-howard-lutnick-transforming-us-ai>.

¹³ U.S. Commerce Secretary Gina Raimondo Announces Key Executive Leadership at U.S. AI Safety Institute, DOC (Feb. 2024), <https://www.commerce.gov/news/press-releases/2024/02/us-commerce-secretary-gina-raimondo-announces-key-executive-leadership>.

CHIPS Program Office: The CHIPS and Science Act, which passed through SST, established the CHIPS Program Office within NIST. The office administers semiconductor investments authorized by the Act.¹⁴ Most recently, NIST assumed operational responsibility for managing \$7.4 billion in semiconductor research funds after the Department of Commerce ended its contract with the National Center for the Advancement of Semiconductor Technology.¹⁵

The Department of Energy (DOE) Office of Science: The DOE's Office of Science possesses some of the nation's top AI technical expertise and funds AI research, including classified national security-relevant projects. DOE also oversees the National Laboratories, which conduct their own AI research and have partnerships with leading American AI companies.

DOE operates three of the world's fastest supercomputers—Frontier at Oak Ridge National Laboratory, Aurora at Argonne National Laboratory, and El Capitan at Lawrence Livermore National Laboratory — which are central to AI and national security applications.^{16,17}

AI Action Plan Overview

The AI Action Plan is structured around three pillars: Accelerate AI Innovation, Build American AI Infrastructure, and Lead in International AI Diplomacy and Security.¹⁸ Some of the recommended policy actions are detailed below.

Pillar I: Accelerate AI Innovation

The plan proposes that NSF, DOE, and NIST invest in automated, cloud-enabled laboratories, which are scientific facilities that can be autonomously and remotely operated. In line with this recommendation, NSF launched a new funding opportunity of up to \$100 million to support a network of remotely operated, AI-enabled “programmable cloud laboratories.”¹⁹ To promote science and research, the plan also recommends expanding public and controlled access to high-quality scientific datasets, with NSF and DOE providing secure access to restricted data.

To better understand AI systems, the AI Action Plan advises that CAISI, NSF, and the Defense Advanced Research Projects Agency prioritize AI interpretability (understanding how AI systems

¹⁴ Frequently Asked Questions: CHIPS Act of 2022 Provisions and Implementation, CRS, R47523, <https://crs.gov/Reports/R47523>.

¹⁵ Department of Commerce Takes Action Against the Biden Administration's Unlawfully Established Operator of the National Semiconductor Technology Center, “Natcast”, DOC (August 2025), <https://www.commerce.gov/news/press-releases/2025/08/department-commerce-takes-action-against-biden-administrations>.

¹⁶ Argonne and Partners Celebrate Aurora Supercomputer's Impact on Science with AI and Exascale Power, ARGONNE NAT'L LAB'Y, <https://www.anl.gov/article/argonne-and-partners-celebrate-aurora-supercomputers-impact-on-science-with-ai-and-exascale-power>.

¹⁷ Lawrence Livermore National Laboratory's El Capitan Verified as World's Fastest Supercomputer, LAWRENCE LIVERMORE NAT'L LAB'Y, <https://www.llnl.gov/article/52061/lawrence-livermore-national-laboratorys-el-capitan-verified-worlds-fastest-supercomputer>.

¹⁸ Winning the Race: America's AI Action Plan, THE WHITE HOUSE (July 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>.

¹⁹ NSF to Invest in New National Network of AI-Programmable Cloud Laboratories, NSF, <https://www.nsf.gov/news/nsf-invest-new-national-network-ai-programmable-cloud>.

work), AI control (ensuring AI systems remain in human control), and AI robustness (withstanding attacks from adversaries such as China). It also recommends that NIST, CAISI, NSF, and DOE build a national ecosystem for AI evaluations (evaluating the performance and reliability of AI systems). This aligns with both Secretary Lutnick's June announcement on CAISI and with the AI Advancement and Reliability Act of 2024, which the SST Committee passed in 2024, and which would authorize a similar center to evaluate AI systems.

The AI Action Plan recommends continuing to expand open-source and open-weight AI by building on the NAIRR Pilot's partnerships with technology companies, laying the foundations for a sustainable NAIRR, and improving the financial market for compute to increase access for academics and startups. The CREATE AI Act, which passed SST in 2024 and was reintroduced in 2025, would formally establish the NAIRR.

Following the plan's release, NSF announced the National AI Research Resource Operations Center, expanding on the successful NAIRR Pilot program.²⁰ NSF announced a partnership with NVIDIA to support the Open Multimodal AI Infrastructure to Accelerate Science project, led by the Allen Institute for AI.²¹ The project will create a suite of advanced, open-source AI models for science, consistent with the AI Action Plan. NSF will contribute \$75 million, and NVIDIA will provide \$77 million.

To advance national security, the plan recommends that DOE, CAISI, OSTP, NSC, and the Intelligence Community collect intelligence on advanced foreign AI projects with national security implications. Further, it encourages NIST to revise the AI Risk Management Framework to remove references to misinformation, climate change, diversity, equity, and inclusion. It recommends that DOE, NSF, DOC, DOD, and other agencies also invest in next-gen manufacturing to support AI development and deployment.

The AI Action Plan recommends that OSTP lead the publishing of an updated National AI R&D Strategic Plan to guide federal AI research investments. In April 2025, NSF announced a request for information to inform the updated plan.²² Additionally, the AI Action Plan emphasizes the importance of facilitating AI adoption by establishing regional regulatory sandboxes where developers can rapidly test AI tools and openly share their data and results.

²⁰ Foundations for Operating the National Artificial Intelligence Research Resource: The NAIRR Operations Center (NAIRR-OC), NSF, <https://www.nsf.gov/funding/opportunities/nairr-oc-foundations-operating-national-artificial-intelligence>.

²¹ NSF and NVIDIA Partnership Enables Ai2 to Develop Fully Open AI Models to Fuel U.S. Scientific Innovation, NSF, <https://www.nsf.gov/news/nsf-nvidia-partnership-enables-ai2-develop-fully-open-ai>.

²² Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan, 90 Fed. Reg. 17835 (Apr. 29, 2025), <https://www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research>.

The plan also recommends NSF, DOC, the Department of Education (ED), and the Department of Labor (DOL) to prioritize AI skill development in education and workforce funding. The LIFT AI Act, which passed SST in 2024, would direct NSF to provide awards for K-12 AI skill development. Additionally, the NSF AI Education Act, which passed SST in 2024, would direct NSF to give awards for using AI in K-12 education.

In April 2025, President Trump signed an executive order creating an AI Education Task Force to coordinate federal efforts related to AI education and a Presidential AI Challenge to spotlight student and educator achievements.²³ In August 2025, NSF opened applications for the Presidential AI Challenge, with First Lady Melania Trump releasing a video to announce the initiative.^{24,25}

Pillar II: Build American AI Infrastructure

The AI Action Plan proposes streamlining permitting for data center construction and optimizing the U.S. energy grid for AI use. Additionally, it suggests that the CHIPS Program Office remove extraneous policy requirements for CHIPS-funded semiconductor manufacturing projects and review their grants to accelerate American manufacturing of semiconductors for AI development and use.

To protect national security, the plan advises that CAISI and DHS bolster cybersecurity protections for critical infrastructure. It recommends that NIST and CAISI strengthen the federal capacity for AI incident response. It also calls for NIST, CAISI, NSC, DOD, and the IC to create technical standards for high-security data centers to protect sensitive government AI workloads from attacks by nation-state actors.

Regarding workforce development, the AI Action Plan advocates for the expansion of training and education programs to cultivate a workforce capable of building, operating, and maintaining AI infrastructure. It suggests that DOL, DOE, ED, NSF, and DOC work with state and local governments to support the creation of industry-driven training programs for AI infrastructure development. Furthermore, the plan recommends that DOL, ED, and NSF also develop programs to engage middle and high school students in priority AI infrastructure careers.

Pillar III: Lead in International AI Diplomacy & Security

The AI Action Plan calls for investing in biosecurity to reduce AI-enabled biological risks. In particular, it recommends that federally funded scientific research institutions be required to

²³ Exec. Order (Apr. 23, 2025) (Advancing Artificial Intelligence Education for American Youth), <https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/>.

²⁴ DCL: Supplemental Funding Requests to Support K-12 Artificial Intelligence, NSF, <https://www.nsf.gov/funding/opportunities/dcl-supplemental-funding-requests-support-k-12-artificial>.

²⁵ First Lady Melania Trump Launches Nationwide Presidential AI Challenge, WHITE HOUSE (Aug. 2025), <https://www.whitehouse.gov/briefings-statements/2025/08/first-lady-melania-trump-launches-nationwide-presidential-ai-challenge/>.

implement robust nucleic acid screening and customer verification procedures. The Nucleic Acid Standards for Biosecurity Act, which passed the SST Committee in 2024 and 2025, would direct NIST to support the development of technical standards for nucleic acid screening.

To protect national security, the plan designates that CAISI lead in evaluating national security risks posed by frontier AI models, including threats involving chemical, biological, radiological, nuclear, or explosive weapons, as well as novel security vulnerabilities. It suggests building and maintaining national security-focused AI evaluation programs through collaborations between CAISI, national security agencies, and research institutions. Additionally, it recommends prioritizing recruitment of top AI researchers into NIST, CAISI, DOE, DOD, the IC, and other federal agencies.

On foreign policy, the AI Action Plan advises strengthening the enforcement of semiconductor export controls, developing new export controls on subsystems used in semiconductor manufacturing, and countering Chinese influence in international governance bodies.

Relevant Executive Orders

The White House released the following three executive orders on the same day as the AI Action Plan.

“Preventing Woke AI in the Federal Government” directs agency leaders to procure only those Large Language Models (LLMs) that adhere to truth-seeking and ideological neutrality principles.²⁶ Developers of these LLMs may comply with the ideological neutrality requirement by releasing certain information about the LLM, such as its evaluations.

“Promoting the Export of the American AI Technology Stack” aims to increase international adoption of American AI technologies rather than the AI technologies developed by our adversaries.²⁷ DOC, the Department of State, and OSTP will implement the American AI Exports Program to support the export of American AI technology, including chips, cloud services, AI models and systems, AI security measures, and use-case specific AI applications.

“Accelerating Federal Permitting of Data Center Infrastructure” eases federal regulatory burdens, allowing the buildout of AI data centers and infrastructure to power them.²⁸ DOC, OSTP, and other relevant agencies will identify and offer financial support for data center projects that involve an electric load greater than 100 megawatts or have received \$500 million from their primary sponsor.

²⁶ Preventing Woke AI in the Federal Government, WHITE HOUSE (July 2025), <https://www.whitehouse.gov/presidential-actions/2025/07/preventing-woke-ai-in-the-federal-government/>.

²⁷ Promoting the Export of the American AI Technology Stack, WHITE HOUSE (July 2025), <https://www.whitehouse.gov/presidential-actions/2025/07/promoting-the-export-of-the-american-ai-technology-stack/>.

²⁸ Accelerating Federal Permitting of Data Center Infrastructure, WHITE HOUSE (July 2025), <https://www.whitehouse.gov/presidential-actions/2025/07/accelerating-federal-permitting-of-data-center-infrastructure/>.

Chairman OBERNOLTE. The Subcommittee on Research and Technology will come to order. Without objection, The Chair is authorized to declare recesses of the Subcommittee at any time.

I recognize myself for 5 minutes for an opening statement.

I'd like to welcome everyone to today's Research and Technology Subcommittee hearing entitled "Advancing America's AI (Artificial Intelligence) Action Plan." Today, we'll hear testimony from the Director of the White House Office of Science and Technology Policy (OSTP), Michael Kratsios, on the Administration's artificial intelligence strategy.

As I think we all know, AI is poised to become a foundational driver of innovation worldwide. From serving as a personal assistant to generating computer code to advancing the frontiers of human science, the scope and impact of AI continues to expand at a truly extraordinary pace.

It is critical that Congress does its job in enacting an appropriate Federal framework for this burgeoning new technology. It is also imperative that the framework maintain the position of the United States as the leading force in the development and deployment of worldwide AI. American leadership in AI is essential to sustained economic growth, technological advancement across a wide range of applications, and the protection of our national security, particularly as competitors such as the Chinese Communist Party (CCP) seek to undermine U.S. leadership in this space.

Through my experience as Co-Chair of the Bipartisan House AI Task Force last Congress, I've seen firsthand the importance of maintaining U.S. leadership in this area. AI-enabled cyberattacks are a growing threat that demands our constant vigilance. At the same time, as AI becomes more embedded in everyday life, Americans are entrusting vast amounts of personal data to these systems, heightening the risk that sensitive information could fall into the hands of malicious actors.

Against this backdrop, last July, the White House unveiled "Winning the AI Race: America's AI Action Plan." This strategy is built around three pillars: innovation, infrastructure, and international diplomacy and security. It is critical that Congress works with the executive branch to craft a unified and effective national AI strategy.

In December of 2024, the Bipartisan House AI Task Force, which was co-led by Congressman Lieu and myself, released a report outlining guiding principles for AI policy. This bipartisan effort resulted in 66 findings and 89 recommendations, many of which align with the AI Action Plan, including expanding access to computing power for researchers, investing in K-12 AI education, and advancing AI evaluations. Among its recommendations, the Task Force called for codifying the National AI Research Resource, what we call NAIRR, and strengthening the science of AI evaluation and standards.

My legislation, the *Create AI Act*, would codify NAIRR, while the forthcoming *Great American AI Act* will formalize the Center for AI Standards and Innovation, or CAISI, at the Department of Commerce to advance AI evaluation and standard setting.

I am very glad to see that the Administration's AI Action Plan including—includes many of the same tenets as the AI Task Force

report, including support for the continuation of NAIRR and for tasking the CAISI with the critical work of developing standards and evaluating frontier AI models. I commend the center for its strong report last fall assessing the national security implications posed by DeepSeek. The center serves as a critical hub for technical AI expertise within our government, and I look forward to its continued work.

OSTP under Director Kratsios’s leadership is steering the development of the AI Action Plan and will oversee its implementation as part of the Nation’s broader science and technology agenda. I hope that we can all agree it is critical that Congress now step up to the plate and work with the executive branch in developing a competitive vision for American leadership in artificial intelligence.

I’d like to thank Director Kratsios for being here today, and I appreciate his willingness to appear before the Subcommittee. We welcome his testimony on this critically important topic.

[The prepared statement of Chairman Obernolte follows:]

Good morning. Welcome to today’s Research and Technology Subcommittee hearing titled, “Advancing America’s AI Action Plan.” Today, we will hear testimony from the Director of the White Office of Science and Technology Policy (OSTP), Michael Kratsios, on the Administration’s artificial intelligence (AI) strategy.

AI is poised to become a foundational driver of innovation worldwide. From serving as a personal assistant to generating computer code to advancing the frontiers of human science, the scope and impact of AI continues to expand at an extraordinary pace.

It is critical that Congress does its job in enacting an appropriate federal framework for this burgeoning new technology. It is also imperative that this framework maintains the position of the United States as the leading force in the development and deployment of worldwide AI. American leadership in AI is essential to sustained economic growth, technological advancement across a wide range of applications, and the protection of our national security, particularly as competitors such as the Chinese Communist Party (CCP) seek to undermine U.S. leadership in this space.

Through my experience as co-chair of the bipartisan House AI Task Force last Congress, I have seen firsthand the importance of maintaining U.S. leadership in this area. AI-enabled cyberattacks are a growing threat that demands constant vigilance. At the same time, as AI becomes more embedded in everyday life, Americans are entrusting vast amounts of personal data to these systems, heightening the risk that sensitive information could fall into the hands of malicious actors.

Against this backdrop, on July 23, 2025, the White House unveiled “Winning the AI Race: America’s AI Action Plan.” The strategy is built around three pillars: innovation, infrastructure, and international diplomacy and security. It is critical that Congress works with the executive branch to craft a unified and effective national AI strategy.

In December 2024, the Bipartisan House AI Task Force, co-led by Mr. Lieu and myself, released a report outlining guiding principles for AI policy. The bipartisan effort resulted in 66 findings and 89 recommendations, many of which align with the AI Action Plan, including expanding access to computing power for researchers, investing in K–12 AI education, and advancing AI evaluations.

Among its recommendations, the Task Force called for codifying the National AI Research Resource (NAIRR) and strengthening the science of AI evaluation and standards. My legislation, the *CREATE AI Act*, would codify the NAIRR, while the forthcoming *Great American AI Act* would formalize the Center for AI Standards and Innovation (CAISI) at the Department of Commerce to advance AI evaluation and standard-setting.

I am glad to see that the Administration’s AI Action Plan includes many of the same tenets as the AI Task Force Report, including support for the continuation of NAIRR and for tasking the Center for AI Standards and Innovation with the critical work of developing standards and evaluating frontier AI models. I commend the Center for its strong report last fall assessing the national security implications posed by DeepSeek. The Center serves as a crucial hub for technical AI expertise within the government, and I look forward to its continued work. OSTP, under Director Kratsios’ leadership, is steering the development of the AI Action Plan and

will oversee its implementation as part of the nation's broader science and technology agenda.

It is clear that Congress must step up to the plate and work with the executive branch in developing a competitive vision for American leadership in artificial intelligence.

I thank Director Kratsios for being here today and appreciate his willingness to appear before the Subcommittee. We welcome his testimony on this critically important topic.

Chairman OBERNOLTE. Thank you very much. I will now yield back the balance of my time, and I will recognize the Ranking Member of the Subcommittee, Representative Stevens of Michigan, for 5 minutes for her opening statement.

Ms. STEVENS. Thank you so much, Mr. Chair, for holding today's hearing.

And of course, thank you to Director Kratsios for joining us today as well. OSTP has always held a very special place in my heart and is an agency or a division of the White House that we are grateful to have a connection to on this Committee. And it is also very important that our thoughtful discussion today will be around implementing the Administration's AI plan while protecting American workers.

We all know that you can't talk about AI innovation and American competitiveness without talking about Michigan manufacturing. And you can't talk about the future of manufacturing without talking about the National Institute of Standards and Technology, or NIST. NIST is the little agency that could, and it is at the forefront of our efforts in artificial intelligence, quantum, robotics, and advanced manufacturing.

Thanks to the *CHIPS and Science Act* of 2022 that many of us in this room helped write and pass, NIST is bringing semiconductor manufacturing back to America to develop the next generation of AI chips right here at home. NIST's semiconductor work is also critical to the Administration's AI plan, and we don't want to see the agency being undermined, something that has long been supported by Democrats and Republicans alike.

Just to shine a light here—and this is the work of our Committee, and this is what we do. We have authorizing ability. And it is important to just shine a light. The budget for the Fiscal Year 2026, it slashed NIST funding by \$325 million, \$325 million dollars. And we're eliminating 500 jobs from the agency's lab program. You know, we know, so many of us, how sacred this work is and how important it is, even when you just have just a handful of researchers working on these matters. And the cuts hinder NIST's AI-related efforts. They're going to weaken cybersecurity and privacy standards, something I have legislation on, and limit advanced manufacturing, physical infrastructure, and resilience innovation.

And given the shared goal of supporting the growth of advanced manufacturing, our next generation, you know, this is something we see alive and well in Michigan, continuing to grow through our supply chain, the design of not only products but also our factory floors using AI applications. I'm really alarmed that the Administration is trying to eliminate NIST's Manufacturing Extension Program (MEP). They repeatedly tried to do that last year. And the MEP program is designed to support, well, not just Michigan, but

all of the Nation's small and midsized manufacturers to see them adopt advanced technology and compete on the global stage.

And so in 2024 alone, just the MEP Center in Michigan created or saved 5,000 jobs. Yet, like every other MEP center, it was on the chopping block. And what makes even less sense is that the Administration's constant attacks on domestic chip manufacturing and the *CHIPS and Science Act*, which we should be all singing loud and proudly, the uncertainty that the manufacturers are facing, despite clear congressional desire to bring chip manufacturing back to America, has been really frustrating.

And I was surprised to learn that we're kind of seeing the arbitrarily canceled semiconductor-focused Manufacturing USA Institute in December, that that happened. And that's stalling a lot of progress.

So I could go on, but we're losing talent and institutional knowledge. We're shrinking. And, frankly, we're destroying our research capacity and undermining global competitiveness, all while we're supposed to be touting how we can lead on AI.

And so I'm going to do everything I can in this Subcommittee, Mr. Chair, for accountability, to stand up for science, the science that Michiganders and our manufacturers rely on every day, so we can continue to innovate and build. And I just want to thank every NIST public servant, the people in this room, and the people in the department.

And with that, thank you, Mr. Chair. I'll yield back.

[The prepared statement of Ms. Stevens follows:]

Thank you for holding today's hearing, Mr. Chairman. I would also like to thank Mr. Kratsios for joining us today. I look forward to a thoughtful discussion on implementing the Administration's AI Action Plan while protecting American workers.

You can't talk about AI innovation and American competitiveness without talking about Michigan manufacturing, and you can't talk about the future of manufacturing without talking about The National Institute of Standards and Technology, or NIST.

NIST is the "little agency that could" and is at the forefront of our efforts in artificial intelligence, quantum, robotics, and advanced manufacturing. Thanks to the *CHIPS and Science Act* that many of us in this room helped write and pass, NIST is bringing semiconductor manufacturing back to America to develop the next generation of AI chips right here at home.

NIST's semiconductor work is critical to the Administration's AI plan and yet for some reason, Mr. Kratsios, the administration is actively undermining this agency that's long been supported by Democrats and Republicans alike.

Notably, the President's Fiscal Year 2026 budget slashes NIST's funding by \$325 million and eliminates over 500 jobs from the agency's lab program. These cuts hinder NIST's AI-related efforts, weaken cybersecurity and privacy standards, and limit advanced manufacturing, physical infrastructure, and resilience innovation.

Given our shared goal of supporting next generation manufacturing in the U.S., I was particularly alarmed to see the Administration try to eliminate NIST's Manufacturing Extension Partnership program repeatedly last year. The MEP program is designed to support Michigan's small and medium sized manufacturers adopt advanced technology and compete on the global stage. In 2024 alone, Michigan's MEP Center created or saved 5,000 Michigan jobs. Yet, like every other MEP center, it was on the chopping block.

What makes even less sense is this Administration's constant attacks on domestic chip manufacturing and the *CHIPS and Science Act*. The uncertainty that these manufacturers face at the whims of this Administration, despite clear Congressional desire to bring chip manufacturing back to America, has been appalling.

Additionally, I was surprised to learn this Administration arbitrarily cancelled the semiconductor-focused manufacturing USA institute in December-stalling years of progress.

Unfortunately, I could go on - and all of this is at just one agency. In Michigan and across the U.S., the Administration's actions are losing us our best talent and

institutional knowledge, shrinking and in some cases destroying our research capacity, and undermining our global competitiveness in science and technology. It's going to cost us decades.

I will continue to do everything I can on this subcommittee to hold this Administration accountable, to stand up for the science that Michiganders rely on every single day, and to ensure Michigan and our country are innovating, building, and driving the future.

As a former NIST employee, I thank the public servants at NIST and across the scientific enterprise for their steadfast work to advance our common good. Director Kratsios, they need you in their corner. Thank you for coming before us today to discuss these important topics, and I look forward to hearing your testimony.

I yield back.

Chairman OBERNOLTE. The gentlewoman yields back. I now recognize The Chairman of the Full Committee, Representative Babin of Texas, for 5 minutes for his opening statement.

Chairman BABIN. Thank you, Chairman Obernolte.

I appreciate the—Mr. Kratsios being here today, and we're looking forward to his testimony. I appreciate this entire hearing.

Supporting the Trump Administration's strategy to advance AI innovation, strengthen infrastructure, and reinforce international security is absolutely essential to maintaining U.S. leadership in the global AI marketplace and promoting peace through strength. The threat posed by the Chinese Communist Party, or CCP, continues to expand in the AI domain. Foreign AI efforts, particularly those pushed by the CCP, present serious national security risks, from research espionage and AI-enabled cyberattacks to the collection of American sensitive data. The AI Action Plan is designed to confront these threats by empowering the Center for AI Standards and Innovation and the Department of Homeland Security to bolster cybersecurity protection for critical infrastructure.

As the—as Chairman of the House Science, Space, and Technology Committee, it's very clear to me that the Trump Administration's vision for American dominance in AI closely aligns with the bipartisan work of this Committee. In January 2021, the *National AI Initiative Act of 2020* became law as part of the *National Defense Authorization Act for Fiscal Year 2021*. Led by the House SST Committee, this law charges key agencies within our jurisdiction to support AI research and development (R&D), many of which received additional policy direction through the AI Action Plan.

As Chairman Obernolte noted, the findings and recommendations of the Bipartisan House AI Task Force are also well aligned with this Administration's strategy. One such recommendation calls for expanding access to advanced computing resources for researchers. The Committee's jurisdiction over the Department of Energy (DOE) places us at the center of this initiative as DOE's National Laboratories host three of the world's fastest supercomputers, Frontier at Oak Ridge National Lab, Aurora at Argonne National Lab, and El Capitan at Lawrence Livermore National Laboratory. Thus, this objective to expand access to computing power builds directly on these existing national capabilities.

Moreover, these National Laboratories, along with DOE's Office of Science, house some of the Nation's leading AI expertise. Other agencies within our jurisdiction, including the National Science Foundation (NSF), also support cutting-edge AI technical research and talent development. The Department of Commerce and the National Institute of Standards and Technology have a long history of

developing non-regulatory standards for emerging technologies and providing independent model evaluations that the private sector can trust.

Tackling complex policy issues surrounding emerging technologies like AI is nothing new for the Science, Space, and Technology Committee. From civil nuclear energy, space exploration, cryptography, information technology, biotechnology and genetics, blockchain and nanotechnology, we have put forward sound policy that ensured U.S. leadership. And while debates over specific AI policies will continue, our Committee has an opportunity to advance common sense legislation that provides access to Federal computing resources, supports research and development, trains the next-generation workforce, offers independent model evaluations, and promotes consensus-based standards. Many of our Members have put forward legislation that addresses the very policies recommended by the Administration and the AI Task Force.

I look forward to advancing AI legislation in the coming weeks and hope very much that this hearing will provide an ample opportunity to inform this process. Congress must ensure that America leads in AI. And doing so will bolster our economic competitiveness, protect our national security, and promote our values of liberties and freedom.

I appreciate your presence today, Mr. Kratsios, and welcome your testimony. With that, I yield back the balance of my time.

[The prepared statement of Chairman Babin follows:]

Good morning. Thank you, Chairman Obernolte, for convening today's hearing. I also thank the Director of the White House Office of Science and Technology Policy (OSTP), Michael Kratsios, for joining us to discuss President Trump's plan for America to win the artificial intelligence (AI) race.

Supporting the Trump Administration's strategy to advance AI innovation, strengthen infrastructure, and reinforce international security is essential to maintaining U.S. leadership in the global AI marketplace and promoting peace through strength.

The threat posed by the Chinese Communist Party (CCP) continues to expand into the AI domain. Foreign AI efforts, particularly those pushed by the CCP, present serious national security risks—from research espionage and AI-enabled cyberattacks to the collection of Americans' sensitive data. The AI Action Plan is designed to confront these threats by empowering the Center for AI Standards and Innovation and the Department of Homeland Security to bolster cybersecurity protections for critical infrastructure.

As Chairman of the House Science, Space, and Technology Committee, it is clear to me that the Trump Administration's vision for American dominance in AI closely aligns with the bipartisan work of this Committee.

In January 2021, the *National AI Initiative Act of 2020* became law as part of the *National Defense Authorization Act for Fiscal Year 2021*. Led by the House SST Committee, this law charges key agencies within our jurisdiction to support AI research and development—many of which received additional policy direction through the AI Action Plan.

As Chairman Obernolte noted, the findings and recommendations of the Bipartisan House AI Task Force are also well aligned with the Administration's strategy.

One such recommendation calls for expanding access to advanced computing resources for researchers. The Committee's jurisdiction over the Department of Energy places us at the center of this initiative, as DOE's National Laboratories host three of the world's fastest supercomputers—Frontier at Oak Ridge National Laboratory, Aurora at Argonne National Laboratory, and El Capitan at Lawrence Livermore National Laboratory. Thus, this objective to expand access to computing power builds directly on these existing national capabilities.

Moreover, these National Laboratories, along with DOE's Office of Science, house some of the nation's leading AI expertise. Other agencies within our jurisdiction, including the National Science Foundation, also support cutting-edge AI technical research and talent development.

The Department of Commerce and the National Institute of Standards and Technology have a long history of developing non-regulatory standards for emerging technologies and providing independent model evaluations that the private sector can trust.

Tackling complex policy issues surrounding emerging technologies like AI is nothing new for the Science, Space, and Technology Committee. From civil nuclear energy, space exploration, cryptography, information technology, biotechnology and genetics, blockchain, and nanotechnology, we have put forward sound policy that ensured U.S. leadership. While debates over specific AI policies will continue, our Committee has an opportunity to advance commonsense legislation that provides access to federal computing resources, supports research and development, trains the next-generation workforce, offers independent model evaluations, and promotes consensus-based standards.

Many of our members have put forward legislation that addresses the very policies recommended by the Administration and the AI Task Force. I look forward to advancing AI legislation in the coming weeks and hope that this hearing will provide an opportunity to inform that process.

Congress must ensure that America leads in AI. Doing so will bolster our economic competitiveness, protect national security, and promote our values of liberty and freedom. I appreciate your presence today, Director Kratsios, and welcome your testimony.

Thank you, and I yield back the balance of my time.

Chairman OBERNOLTE. Thank you, Chairman Babin.

I now recognize the Ranking Member of the Full Committee, Representative Lofgren of California, for 5 minutes for her opening statement.

Ms. LOFGREN. Thank you, Mr. Chairman, and, too, thank you, Mr. Kratsios, for joining us today.

AI has the potential to reshape the American economy and innovation ecosystem. I'm really excited about its promise and the potential opportunity it brings to improve productivity and to accelerate innovation. However, AI has also sometimes accelerated harmful and even criminal activities. Just a little over a week ago, xAI's chatbot Grok made headlines by generating thousands of instances of nonconsensual sexual imagery, including child pornography, at the request of users on X's main platform. We've also seen major instances of chatbots encouraging users with mental health issues to murder and commit suicide. These are just two of many troubling examples.

Nearly half a year has passed since the Administration unveiled its AI Action Plan with a focus on innovation, infrastructure, international diplomacy, and security goals that I certainly appreciate and support. Unfortunately, the plan only minimally addresses the risks of AI. And, even where it does, including with respect to deepfakes, the Administration has failed to take meaningful action to address these risks. To the contrary, this Administration's actions raise major questions about the disconnect between the Action Plan's goals and reality. And I'd like to address just two specific areas where the Administration's actions have raised concern.

First, this Administration has taken steps to prevent States like California from regulating against harms that have been created or exacerbated by AI systems. In December, President Trump signed an Executive order (EO) that directs the Department of Justice to sue States over their AI laws and threatens to withhold billions in Federal broadband funding from these states. This order asserts that the Administration, not Congress, not State legislatures, but the Administration itself, should have the power to decide what kind of State laws are too burdensome and to reallocate where bil-

lions of dollars should go as a result. I think this order is unconstitutional, but I'm not here to defend every State AI law that's been proposed or passed.

Some of what California has adopted to protect its people is appropriate. And other legislation that was beyond the scope of what a State should do was vetoed by the Governor with the support of the California congressional delegation, vetoed because it went too far.

But there was a reason Justice Brandeis suggested that States are the laboratories of democracy. What we should not do is preempt the States from taking necessary actions to protect their citizens while here in Congress, we do nothing to pass legislation ourselves.

It's not just Democrats saying this. Florida Governor Ron DeSantis has said that President Trump's Executive order, quote, "can't preempt State legislative action." And in November, a bipartisan group of 36 State Attorney Generals wrote to leaders of Congress opposing slapdash Federal preemption efforts. And I'd like unanimous consent to put this letter into the record.

Chairman OBERNOLTE. Without objection.

Ms. LOFGREN. Secondly, I'm very concerned by the Administration taking cuts of revenue or equity in companies. The AI Action Plan emphasizes free markets, deregulation, getting government out of the way of the private sector. But over the past year, the Administration has spent billions of taxpayer dollars to take direct ownership stakes in private companies. The government now owns nearly 10 percent of Intel, making it the largest shareholder. It holds equity positions in rare earth mining companies and is negotiating similar deals with quantum computing companies. This trend is unusual and concerning. In our Nation's history, the U.S. Government has taken equity shares in private companies only in times of war or economic crisis. Actually, this is socialism on the part of the Trump Administration. That's a charge that's sometimes made against Democrats, even though Democrats favor free markets, but it's what the Trump Administration is actually doing: engaging in socialism. Now, how are the Administration's actions different from Chinese state capitalism, I ask.

Mr. Kratsios, America can and must lead in the field of artificial intelligence, but it's going to take a whole lot more than empty promises and emulating the PRC (People's Republic of China) to make that happen. I look forward to hearing from you about these challenges and others during today's hearing.

Thank you, Mr. Chairman, and I yield back.

[The prepared statement of Ms. Lofgren follows:]

Thank you, Mr. Chairman, and thank you to Mr. Kratsios for joining us today. AI has the potential to reshape the American economy and innovation ecosystem. I am truly excited about its promise and the potential opportunity it brings to improve productivity and accelerate innovation.

However, AI has also accelerated harmful and even criminal activities. Just a little over a week ago, xAI's chatbot Grok made headlines by generating thousands of instances of nonconsensual sexual imagery—including child pornography—at the request of users on X's main platform. We have also seen major instances of chatbots encouraging users with mental health issues to murder and commit suicide. These are just two of many troubling examples.

Nearly half a year has passed since the Administration unveiled its AI Action Plan, with a focus on innovation, infrastructure, and international diplomacy and

security—goals that I certainly appreciate and support. Unfortunately, the plan only minimally addressed the risks of AI, and even where it did—including with respect to deepfakes—the Administration has failed to take meaningful action to address these risks. To the contrary, this Administration's actions raise major questions about the disconnect between the Action Plan's goals and reality. I'd like to address two specific areas where the Administration's actions raise concerns.

First, this Administration has taken steps to prevent states, like California, from regulating against harms that have been created or exacerbated by AI systems.

In December, President Trump signed an executive order that directs the Department of Justice to sue States over their AI laws and threatens to withhold billions in federal broadband funding from these States. This order asserts that the Administration—not Congress, not State legislatures, but the Administration itself—should have the power to decide what kinds of State laws are too burdensome, and to reallocate where billions of dollars should go as a result. I believe this order is unconstitutional.

I'm not here to defend every state AI law that's been proposed or passed. Some of what California has adopted to protect its people is appropriate and other legislation the Governor, with the support of the delegation, vetoed because they were not appropriate.

But there was a reason Justice Brandeis suggested that states are the laboratories of democracy. In the absence of a Federal framework, we should be encouraging states to experiment with how best to manage the risks to their citizens. What we should not do is preempt the states from taking necessary actions to protect their citizens while we twiddle our thumbs here in Congress.

It's not just Democrats saying this. Florida Governor Ron DeSantis has said that President Trump's executive order "can't preempt state legislative action." And in November, a bipartisan group of 36 State Attorneys General wrote a letter to leaders of Congress opposing slapdash federal preemption efforts. I'd like unanimous consent to enter this letter into the record, Mr. Chairman.

Second, I am deeply concerned by the Administration taking cuts of revenue or equity in companies.

The AI Action Plan emphasizes free markets, deregulation, and getting government out of the way of the private sector.

But over the past year, the Administration has spent billions of taxpayer dollars to take direct ownership stakes in private companies. The government now owns nearly 10 percent of Intel, making it the largest shareholder. It holds equity positions in rare earth mining companies and is negotiating similar deals with quantum computing companies. This trend is unusual and concerning. In our nation's history, the U.S. government has taken equity shares in private companies only in times of war or economic crisis.

This is socialism on the part of the Trump Administration. That's a charge that is sometimes made against Democrats, even though it is something we oppose, but it's what the Trump Administration is actually doing.

How are the Administration's actions different from Chinese state capitalism?

Mr. Kratsios, America can and must lead in the field of artificial intelligence. But it's going to take a whole lot more than empty promises and emulating the PRC to make it happen. I look forward to hearing from you about these challenges and others during today's hearing.

Thank you, Mr. Chairman, and I yield back.

Chairman OBERNOLTE. Thank you, Ranking Member Lofgren.

It's now an honor to introduce our witness. Our witness today is Hon. Michael Kratsios, who is the Director of the White House Office of Science and Technology Policy. He is President Trump's chief science and technology policy adviser. And as the 13th Director of the White House Office of Standards and Technology Policy, Director Kratsios oversees the development and execution of the Nation's science and technology policy agenda. He leads the Administration's efforts to ensure American leadership in scientific discovery and technological innovation, including in critical and emerging technologies, such as artificial intelligence, quantum computing, and biotechnology.

In the first Administration, he served as the fourth Chief Technology Officer of the United States at the White House and as Under Secretary of War for Research and Engineering at the Pen-

tagon. Prior to his service in the White House, Director Kratsios invested in, advised, and built technology companies in Silicon Valley.

A South Carolina native, Director Kratsios graduated from Princeton University, but we will not hold that against you, and served as a visiting scholar at Beijing's Tsinghua University.

Without—I now recognize Director Kratsios for 5 minutes to present his testimony.

**TESTIMONY OF HON. MICHAEL KRATSIOS,
DIRECTOR, WHITE HOUSE OFFICE OF SCIENCE
AND TECHNOLOGY POLICY**

Mr. KRATSIOS. Thank you, Chairman Obernolte and Ranking Member Stevens, as well as Full Committee Chairman Babin and Ranking Member Lofgren, for inviting me to speak to you today about the President's AI policies.

Last July, the Trump Administration released "Winning the AI Race: America's AI Action Plan," outlining a strategy to maintain global leadership in AI based on three pillars: innovation, infrastructure, and international partnerships. Over the last 6 months, the Administration has moved from strategy to execution as I and my team at the White House coordinate implementation across the Federal Government. I'm excited to highlight where we stand now in executing this playbook, but first let me thank the Members of this Committee for all that you have done for American AI.

As my office coordinates the Administration's implementation of the Action Plan, I see many opportunities for collaboration with this Committee and with Congress. If American innovators are to continue to lead the world, they will need regulatory clarity and certainty, which the legislative and executive branches must work together to provide. The Action Plan focuses on three main priorities for the U.S. Government: removing barriers to innovation, securing energy dominance, and exporting our technology to partners around the world. In the past 6 months, we have seen tremendous progress in all of these areas.

In innovation, with the release of our request for information concerning regulatory reform on AI last September, we're working with industry and the American people to relieve innovators of undue regulatory burdens and to formulate policy frameworks that safeguard the public interest while enabling further revolutionary developments. I'm particularly excited about the innovative potential of the Genesis Mission and AI for science. With the signing of that Executive order, President Trump has mobilized the largest Federal scientific effort since the Apollo program. By fusing massive Federal datasets with advanced supercomputing capabilities, Genesis will help America's scientists automate experiment design, accelerate simulations, and generate predictive models for everything from medicine and energy to materials and agriculture.

In infrastructure, of course, the Administration's effort to clear away red tape and facilitate AI construction have been enormously successful. But I am especially excited about the energy capacity American industry is building, both to power the AI revolution and all of the other incredible technologies this new age of discovery will unlock. President Trump and the Department of Energy are

committed to accelerating and enhancing the growth of American nuclear power, creating space to experiment, facilitating small modular reactor (SMR) buildout, and continuing the pursuit of fusion energy.

In international partnerships and AI diplomacy, we continue to push back against global AI governance at the United Nations, G7, APEC (Asia-Pacific Economic Cooperation), and other forums, and to defend great American companies from foreign nations' stifling regulatory regimes. I am particularly excited about the American AI export program. As the Commerce and State Departments roll that out, there will soon be a request for proposals shared with industry, and a formal launch of the program in the coming months. Our goal is for U.S. companies to provide modular AI stack packages that empower countries to develop sovereign AI capabilities with American technology.

The Action Plan is a giant leap forward, furthering first steps President Trump took for American AI dominance in his first term. With the call for this plan, his first week back in office, the President recommitted himself and the country to American AI leadership. The need for renewed effort was clear. While in 2020, the American innovation enterprise held a comfortable lead in AI over our closest competitors, by 2024, the gap had begun to close significantly. But with his Golden Age vision of scientific rigor and technological progress, President Trump has restored a spirit of confidence to our innovation enterprise. We are approaching AI not with fear but with responsible boldness.

Looking ahead, there is still so much to be done working together. As our innovators continue to find novel applications of AI technology to everyday life, we can ensure they benefit all Americans through small business training, workforce development, and AI education. I'm proud to say that more than 250 companies have signed the First Lady's Pledge to America's Youth, committing hundreds of millions of dollars to investing in AI education. And I just returned from consumer electronics show, where there is obvious excitement about American AI but also about what's ahead in quantum information science.

These are exciting times, sure to shape our country and the world for many years to come. Thank you all for your leadership.

[The prepared statement of Mr. Kratsios follows:]

The Honorable Michael J.K. Kratsios

Director, Office of Science and Technology Policy
Assistant to the President for Science and Technology
The White House

Hearing on: “Advancing America’s AI Action Plan”

Statement before the
Subcommittee on Research and Technology
Committee on Science, Space, and Technology
United States House of Representatives

Washington, D.C.

January 14, 2026

Thank you, Chairman Obernolte, and Ranking Member Stevens, as well as Full Committee Chairman Babin and Ranking Member Lofgren, for inviting me to speak to you today about the President's AI policies.

Last July, the Trump Administration released "Winning the Race: America's A.I. Action Plan," outlining a strategy to maintain global leadership in AI based on three pillars: Innovation, Infrastructure, and International Partnerships. Over the last six months, the Administration has moved from strategy to execution, as I and my team at The White House coordinate implementation milestones across the federal government.

I am excited to highlight where we stand now in executing this playbook, but first let me thank the members of this committee for all that you have done for American AI. As my office coordinates the administration's implementation of the AI Action Plan, I see many opportunities for collaboration with this committee and the Congress. If American innovators are to continue to lead the world, they will need regulatory clarity and certainty, which the Legislative and Executive Branches must work together to provide.

The Action Plan focuses on three main priorities for the U.S. government: removing barriers to innovation, securing energy dominance, and exporting our technology to our partners around the world. In the past six months, we have seen tremendous progress in all of these areas.

In Innovation, with the release of our request for information concerning regulatory reform on artificial intelligence late last September, we are working with industry and the American people to relieve innovators of undue regulatory burdens and to formulate policy frameworks that safeguard the public interest while enabling further revolutionary developments.

I am particularly excited about the innovative potential of the Genesis Mission and AI for science. With the signing of that executive order, President Trump has mobilized the largest federal scientific effort since the Apollo Program. By fusing massive federal datasets with advanced supercomputing capabilities, Genesis will help America's scientists automate experiment design, accelerate simulations, and generate predictive models for everything from medicine and energy to materials and agriculture.

In Infrastructure, of course, the administration's efforts to clear away red tape and facilitate AI construction have been enormously successful. But I am especially excited about the energy capacity American industry is building, both to power the AI revolution and all the other incredible technologies this new age of discovery will unlock. President Trump and the Department of Energy are committed to accelerating and enhancing the growth of American nuclear power, creating space to experiment, facilitating small modular reactor buildout, and continuing the pursuit of fusion energy.

In International Partnerships and AI diplomacy, we continue to push back against global AI governance at the U.N., G7, APEC, and other forums, and to defend great American companies from foreign nations' stifling regulatory regimes. I am particularly excited about the American AI Export Program. As the Commerce and State Departments roll that out, there will soon be a Request for Proposals shared with industry, and a formal launch of the program in the coming

months. Our goal is for U.S. companies to provide modular AI stack packages that empower countries to develop sovereign AI capabilities with American technology.

The Action Plan is a giant leap forward, furthering first steps President Trump took for American AI dominance in his first term. With the call for this plan in his first week back in office, the President recommitted himself, and the country, to U.S. AI leadership. The need for renewed effort was clear. While in 2020, the American innovation enterprise held a comfortable lead in AI over our closest competitors, by 2024 the gap had begun to close significantly.

But with his Golden Age vision of scientific rigor and technological progress, President Trump has restored a spirit of confidence to our innovation enterprise. We are approaching AI not with fear, but with responsible boldness.

Looking ahead, there is still so much to be done working together. As our innovators continue to find novel applications of AI technology to everyday life, we can ensure they benefit all Americans through small business training, workforce development, and AI education. I'm proud to say more than 250 companies have signed the First Lady's Pledge to America's Youth, committing hundreds of millions of dollars to investing in AI education. And I just returned from the Consumer Electronics Show, where there is obvious excitement about American AI, but also about what's ahead in quantum information science.

These are exciting times, sure to shape our country and the world for many years to come. Thank you all for your leadership.

Michael Kratsios, Assistant to the President and Director of the White House Office of Science and Technology Policy

Michael Kratsios is President Donald J. Trump's chief science and technology policy advisor.

As the thirteenth Director of the White House Office of Science and Technology Policy, Michael oversees the development and execution of the Nation's science and technology policy agenda. He leads the Trump administration's efforts to ensure American leadership in scientific discovery and technological innovation, including in critical and emerging technologies such as artificial intelligence, quantum computing, and biotechnology.

In the first Trump administration, he served as the fourth Chief Technology Officer of the United States at the White House and as Under Secretary of War for Research and Engineering at the Pentagon.

Prior to the White House, Michael invested in, advised, and built technology companies in Silicon Valley. A South Carolina native, Michael graduated from Princeton University and served as a Visiting Scholar at Beijing's Tsinghua University.

Chairman OBERNOLTE. Well, thank you very much for your testimony. We will now move on to question and answers from the panel, and we'll start with questions from myself. So I'll recognize myself for 5 minutes.

Director Kratsios, I want to start with the points that Ranking Member Lofgren raised, which I thought were excellent and really pertinent, as usual, and, in particular, the point about preemption. So, to be clear, I don't think anyone believes that the States shouldn't have a lane in regulating AI, but I think what everyone believes is that there should be a Federal lane and that there should be a State lane and that the Federal Government needs to go first in defining what is under article I of the Constitution, interstate commerce, and where those preemptive guardrails are that that—where regulation is reserved only for regulation at the Federal level and then outside those guardrails, where the States are free to go be the laboratories of democracy that they are.

So the President recognized this in his Executive order last month. He's calling for Congress to work with the executive branch in defining what those guardrails are. I think there was an explicit acknowledgement in that Executive order that congressional action is needed. It's not something that could be done unilaterally.

So can you talk a little bit about what the Administration's vision for that is and where you think those guardrails ought to be?

Mr. KRATSIOS. Absolutely. The President first spoke about the need for a sensible national policy framework, actually in July, when we released the AI Action Plan. And in that speech, here in Washington, he made it clear that, you know, having a set of 50 different laws all across the country is actually not the best thing for American innovation. And as someone who's worked in Silicon Valley and worked with lots of startups and been at startups, I understand the challenge.

And I think what is sometimes missed in this conversation is if you have this tremendous patchwork of laws all across the country, the folks who actually are able to work within that system most successfully are the deep-pocketed, large big tech companies. The small innovators, the entrepreneurs, the people who want to start new businesses, forcing them to try to find a way to comply with 50 different sets of AI rules is actually anti-innovation and is something that I don't think anyone on this Committee actually supports.

The President then took another step forward in December of last year, where he laid out an Executive order charging me and David Sacks to work to create legislation to help find a path forward for sensible—for a sensible national policy framework. And that's something that I very much look forward to working with everyone on this Committee for. I think what was clear in the Executive order specifically was that any proposed legislation should not preempt otherwise lawful State actions relating to child safety protections, AI compute and data infrastructure, and also State government procurement in use of AI. Those were ones that were called out in the Executive order, but we look forward over the next weeks and months to be working with Congress on a viable solution.

Chairman OBERNOLTE. Well, thank you very much.

And, you know, this is something that we have been grappling with now for several years. We had a whole chapter on preemption in the AI Task Force report. I think it was very helpful that the Administration is also thinking about this issue and thinking about where those State lanes should be and how that they—how they intersect with the Federal lanes. So let's keep working on that.

I also wanted to, in addition to commending you for the good work of CAISI, talk about the need for us in Congress to formally codify it. And, you know, the work it does in doing AI model evaluation is essential in creating what's a—what's a toolbox, a regulatory toolbox, for our sectoral regulators so everyone doesn't have to reinvent the wheel. But, you know, we've had this in successive Administrations now. Under the Biden Administration, we had the AI Safety Institute. The Trump Administration, we have CAISI. There are many of the same functions that are performed by those organizations. But I think everyone would agree it's unhealthy for us to have every successive Administration spin up a brand new agency that essentially is doing something with a long-term mission that needs continuity.

So can you talk about whether or not you think we in Congress need to go ahead and codify this as part of implementing our national strategy on AI?

Mr. KRATSIOS. I think CAISI, as was kind of discussed previously, I think is a very important part of the larger AI agenda. I think one of the important and big steps that the Administration took at the beginning of—of middle of last year was to reframe what was previously a safety institute into one that is focused on standards innovation. And I think from my perspective, the most important thing that can be done around CAISI at NIST is to focus on what NIST is really good at and what Ms. Stevens was talking about.

It's absolutely important that the—that the legacy work around standards relating to AI are undertaken by CAISI. And that's what they're challenged to do. And that's the focus that they should have because the great standards that are put out by CAISI and by NIST are the ones that ultimately will empower the proliferation of this technology across many industries.

Chairman OBERNOLTE. Right. Well, thank you very much for your testimony. I'm looking forward to hearing the questions from our other Subcommittee Members.

I now recognize Ranking Member Stevens for her questions.

Ms. STEVENS. Thank you.

And so, Mr. Kratsios, I missed it in your bio that the Chairman read. Could you just remind me what you were up to in the period of the Great Recession, particularly the years 2009 and 2010? What were you doing professionally?

Mr. KRATSIOS. Yes. I was actually an investment banker for a year.

Ms. STEVENS. Oh. Yes. OK. So you—you know that period of time pretty well. Yes. I was—

Mr. KRATSIOS. Quite personally.

Ms. STEVENS. I was in the Department of the Treasury working at—on the auto rescue. And it was this humble initiative. It was responsible for making sure the auto industry didn't go belly up.

And we then created the White House Office of Manufacturing Policy coming out of that. And one of the steady and delightful partners that we had during that period of time was the Manufacturing Extension Partnership. As you know from your investment banking career, access to capital across our supply chain was just being squeezed. And it was a terrifying time, particularly in Michigan. We were the nadir of that Great Recession.

And so throughout my career, I have seen firsthand outside of just what the proof in the pudding is for NIST MEP, for every dollar spent, \$18 of output into the economy. I have—we have seen directly how NIST MEP has helped the small to midsized manufacturer, who is really the elixir of our—our communities and our—our economic drivers, the small businesses. And we know that the cumbersome reality of technology development, as we—as the Chairman was just talking about, CAISI, and you so nicely answered about its importance and did recognize NIST and the critical role that NIST has played, that—we have to have technology adoption throughout our supply chain and a recognition that NIST MEP plays a role in that.

And so I just I just wanted to hone in that, you know, as we had put forth over a decade ago—and Congress directed the National Science and Technology Council, housed within OSTP, to develop a national advanced manufacturing strategy. And OSTP and NIST are in the process of updating that strategy.

Are you in a position to commit to ensuring that MEP and other NIST programs, including Manufacturing USA, which is this robust network of R&D labs, that that will be central to its implementation?

Mr. KRATSIOS. So that's a program run out of Commerce, and it's a conversation I would love to continue to have with Secretary Lutnick and his team there. I think there's obviously important work across all of these NIST programs and would love to learn more about this one specifically with the team at NIST.

Ms. STEVENS. Yes. A couple of years ago, they—they celebrated their—their anniversary, you know, and it's the Manufacturing USA, which works very closely with NIST; in some instances is funded through NIST and, of course, the—the MEP program. And this is something that has carried through throughout a multitude of Administrations and was really designed to help us compete as—as a nation vis-à-vis other countries that have this collocation of R&D, tech transfer, and workforce development. So I do appreciate you reaching out to the Commerce Secretary about it.

We'd love to show you the one that we have in Detroit called LIFT (Lightweight Innovations For Tomorrow), the workforce development but—it is incredible that happens there but also the collocation of large, small, and midsized manufacturers that are all developing their—their research and development.

And then when you come and visit LIFT, you can come and see our MEP Center. And I want them to show you directly how they are leading the—these manufacturers. They are really one of the first enterprises that had down industry 4.0 and had a directive on that. And when we're looking at cutting costs, which we all know is so important for the taxpayer, it's—and when we're going to look at all this great stuff in AI and how it gets applied and how it gets

used and, you know, nice that you have this framework cooking here. We're not going to leave people behind. And we want to do it along our small and midsized manufacturers.

So thank you so much. And with that, I'll yield back, Mr. Chair.

Chairman OBERNOLTE. The gentlewoman yields back. I now recognize The Chairman of the Full Committee, the gentleman from Texas, Mr. Babin, for 5 minutes for his questions.

Chairman BABIN. Thank you very much. And, again, welcome, Mr. Kratsios. We appreciate you being here.

The AI Action Plan recommends that NIST revise its AI risk management framework to remove bias and discrimination. First off, how do you—how do these recommended changes help ensure that government guidance remains neutral and consistent with American values of freedom and liberty?

Mr. KRATSIOS. Thank you so much for that question.

I think one of the recommendations out of the Action Plan was to do just that. I think, as we've spoken a lot about NIST, it's an agency that is very near and dear to my heart and to the—to the entire OSTP team. We want NIST to be focused on advanced scientific metrology. Inserting political rhetoric into their work is something that devalues and corrupts the broader efforts that NIST is trying to do across so many important scientific domains. So our hope through this effort is to depoliticize NIST as much as possible and to put it in a place where it's promulgating standards which can benefit all scientific innovators across the country.

Chairman BABIN. Great. Thank you.

The Genesis Mission proposes to modernize our power grid through the use of AI-driven technologies. First, how will this contribute to America's energy dominance?

Mr. KRATSIOS. Well, broadly speaking, energy dominance and energy leadership has been a top priority for the President, broadly this theme of energy abundance. For us, we believe that there's great technologies that are ultimately going to drive broader energy abundance. It can be everything from fusion technology that we have—hope to have in the decades to come and even the use of AI to optimize grids and so many other ways to do it. So for us and especially for this President, our National Energy Dominance Council, energy abundance is key. And Genesis will be a big part of that.

Chairman BABIN. Exactly. And, then, second, what specific short-term outcomes can we expect from the Genesis Mission over the next two to 3 years?

Mr. KRATSIOS. So on the—on the short-term front, I think what we hope to do over the next year is to broaden the participation of Genesis across the government and across the international community. As you may have seen, the first big announcement around Genesis was the addition of partners across the private sector here in the United States. The tasking of the Executive order to me and to OSTP as—as a Director has been to try to bring in and incorporate other agencies. And why that's so important to Genesis is the underlying thesis of Genesis is that the government has extraordinarily valuable scientific data that when pooled together and collaborated with AI can drive tremendous scientific discovery and acceleration.

So our next step is, how do we bring important potentially healthcare data or health—or data from the National Science Foundation or from even NIST or other scientific agencies?

And then the next short-term goal is to figure out who are our international partners in the scientific community that have things that they can offer the Genesis Mission which would accelerate it—its ultimate goal?

Chairman BABIN. And, then, looking further ahead, what is the long-term vision for the Genesis Mission beyond its first decade? And how do you impact or how do you anticipate its impact evolving over time?

Mr. KRATSIOS. I think the overarching goal that we have said consistency—consistently is that the Genesis Mission's goal is to double the output of United States R&D in a decade. And we want to be able to do that by focusing on some very large, grand challenges, everything from across energy to biotech to drug discovery, nuclear fusion, critical minerals. And that's kind of our North star.

Chairman BABIN. Absolutely. And, then, to maintain a competitive advantage over our bad actors, like the Chinese Communist Party, President Trump has emphasized the need to build, baby, build across the U.S. economy and our critical infrastructure. And from your perspective, Director Kratsios, what elements of the AI Action Plan most effectively strengthen the U.S. economy and position the United States as the global leader in AI?

Mr. KRATSIOS. Well, I don't know. I'm very biased because I love the whole report. So I think each of the three pillars is—plays a big part in what you're arguing for. I think on the—on the building front, obviously, pillar two around infrastructure and data center buildout is—is extraordinarily critical. We want to develop a regulatory environment that allows these, the product—the sort of standing up of this AI infrastructure, to happen and also in a way that doesn't necessarily adversely affect American ratepayers.

The second piece is—is around the regulatory structure. We want to create a regulatory environment where our greatest innovators can develop and promulgate their AI technologies here in the United States in a safe way. And we think we're charging toward—toward that.

And the last piece, which has been a sort of a big sort of priority for me, even from my time in Trump 45, we have to continue to invest in critical AI recent development funding as a Federal Government. And there's been a lot of talk about Federal budgets and the President's proposal last year, but the key thing that I always try to remind people is, even in our attempt to try to rightsize the budget, the one area where we have kept a consistent amount of proposed budget funding has been in AI. We believe that this is a critical research priority for the Administration, and it's something that we're going to continue to fund.

Chairman BABIN. Absolutely. Thank you so very much.

And my time is expired. Mr. Chairman, I yield back.

Chairman OBERNOLTE. The gentleman yields back. I now recognize the Ranking Member of the Full Committee, Representative Lofgren of California, for 5 minutes for her questions.

Ms. LOFGREN. Thank you, Mr. Chairman.

I want to return to a point that I raised in my opening statement. The nonconsensual manipulation of people's photos and the rampant uncontrolled dissemination of sexualized images of children is evil, disgusting stuff. And, instead of acting quickly to stop it, Elon Musk seemed to revel in it until public pressure became too intense. And then what did he do? He has now said only paid subscribers can have access to Grok's image generation feature. So pedophiles could previously conjure up these images for free, but he's now monetized the feature and will be collecting \$3 monthly from depraved individuals who choose to subscribe. He's created a revenue stream for child pornography.

It sure looks like laws against the creation and dissemination of child sexual abuse material are being broken. However, President Trump is sending American taxpayer dollars to xAI through a deal made in September. Essentially, we're paying Elon Musk to give perverts access to a child pornography machine.

Now, you're the President's chief science and technology policy adviser and the Administration's point person on AI. So we want you to give us answers on this.

I'm going to be sending a letter shortly to initiate our investigation into this issue, but anyone with a stake in this should be working to determine what went wrong and to ensure it never happens again.

I welcome all of my colleagues, both Democrats and Republicans, to join with me in sending this oversight letter, which I shared with Chairman Babin yesterday. Stamping out child sexual exploitation should not be a partisan issue.

Now, I have several questions for you, Director. Were you involved in the decision to enter into the partnership with xAI, allowing Federal agencies to utilize Grok for government work? Is the General Service—Services Administration (GSA) partnership with xAI still active and being used to integrate Grok into Federal agency work streams, even with the disgusting news of the past few weeks? When the news broke regarding the child sexual abuse images being created by Grok, did you take any steps to ensure that Federal agencies were no longer able to use Grok, at least until we are sure that the issue had been addressed? Have you personally briefed President Trump on the recent events involving Grok?

You're the highest ranking science adviser in the White House. You should be heavily involved in Federal action on this matter. Have you engaged with the Department of Justice on this—this issue with the FCC (Federal Communications Commission), the FTC (Federal Trade Commission), the GSA?

Mr. KRATSIOS. So I am not involved in procurement decisions at—at the GSA. I think, broadly speaking, the Trump Administration is committed to protecting the dignity and the privacy and the safety of children in the digital age. The misuse of AI tools requires accountability for harmful or inappropriate use, not necessarily blanket restrictions on the use and development of—of that technology.

On the issue of Grok, which I'm not personally involved in in any way, if the Federal employees are misusing a government AI platform in a harmful or inappropriate way, they—that should be addressed and those people should be removed from their positions.

I don't have any specific insight into the Federal procurement process, but I would refer you to an April 2025 OMB (Office of Management and Budget) memo titled "Accelerating Federal Use of AI through Innovation, Governance, and Public Trust." That memo provides guidance on how agencies can promote the responsible adoption, use, and continued development of AI while ensuring appropriate safeguards are in place to protect privacy, civil rights, and civil liberties and to mitigate any unlawful discrimination.

Now, as many people on this Committee know, the Trump Administration has clearly demonstrated our willingness to implement guardrails against inappropriate use of AI, as evidenced by the signing of the *TAKE IT DOWN (Tools to Address Known Exploitation by Immobilizing Technological Deepfakes On Websites and Networks) Act* by the President that was signed last May.

Ms. LOFGREN. If—if I may, Mr.—Mr. Kratsios, yes, the GSA is doing this, but we are essentially paying Musk. And we're going to have a problem here. I mean, inevitably, there's going to be a misuse. But even if we fire Federal employees who create pornography using Grok, that we would be paying Mr. Musk until he creates a barrier to this misuse is very troubling to me.

You know, I'm for technology. I'm from Silicon Valley. I grew up there, and I still live there. But if we do not resolve misuse, we are going to have a serious impediment to the development of AI, in addition to the impact on employment.

I'm—I'm just noting—the Ranking Member of the Subcommittee mentioned employment. Manufacturing employment is down 68,000. We lost 161,000 blue-collar jobs last year.

So, with that, Mr. Chairman, I yield back. And I will make available this letter to you, as—which I've already shared with Chairman Babin.

Chairman OBERNOLTE. Thank you, Representative Lofgren.

We'll hear next from the representative from North Carolina. Mr. Rouzer, you are recognized for 5 minutes.

Mr. ROUZER. Thank you, Mr.—Mr. Chairman.

Mr. Kratsios, thank you so much for being here.

First question is, what would you consider the main hurdle to innovation? Is—would that be the lack of Federal preemption? I would assume that would probably be in the top three, just wanting to see what your answer is.

Mr. KRATSIOS. That—that is certainly up there. I think for us, providing regulatory clarity to America's innovators is extraordinarily important.

I think the—the other piece of the puzzle, which I always talk about, is we want to create a regulatory environment that provides a level of clarity and a level of understanding for all of our innovators. And the most important part of that is promulgating and working toward a use-case sector-specific approach to AI regulation. Creating a "one size fits all" regulation around AI is not the way that we can best deal with all of these new AI technologies. Folks that are developing AI-powered medical diagnostics should continue to be regulated by the FDA (Food and Drug Administration), for example. Anyone who is developing a drone should continue to be regulated by the FAA (Federal Aviation Administration). And I think some of the impediments, especially there's been

great examples globally about the things that we should definitely not do. Things like the *EU AI Act* is a terrific example of a mistake that can be made where you try to create a “one size fits all” regulatory regime, and ultimately, you end up with less innovation.

Mr. ROUZER. A core pillar of the AI Action Plan is infrastructure, including our Nation’s ability to develop a skilled workforce to use cutting-edge AI systems. North Carolina, as you know, has a growing ecosystem of higher education preparing the next generation of AI professionals. UNC (University of North Carolina)-Wilmington and Fayetteville State University in my district offer AI-focused education with hands-on experience. And community colleges, such as the Cape Fear Community College in my district, is advancing AI literacy and technical skills. Employer access, obviously, to these next-generation workers with these needed skills is critical for economic development and competitiveness.

Can you comment? How is the Federal Government working with these colleges and universities across the country, including in North Carolina, to strengthen AI-focused workforce development programs?

Mr. KRATSIOS. Yes. This is so important. And for us, we believe that AI education is something that begins in K through 12 and extends well past when you even graduate from—from college. And at each of those levels, we have different programs and initiatives to drive that AI reskilling and upskilling to happen.

In K through 12, the Administration through Executive order launched the AI Education Task Force, which I chair with the First Lady. And there’s been a tremendous amount of effort around how we can teach America’s youth to understand and essentially demystify this technology. It’s not just about teaching students how to use the technology but understanding what the technology is. What is AI good for? What is it not good for? When should you be using it, when you shouldn’t? When should you not be using it? When does it go—go awry? And I think that’s the type of programs that we’re trying to do for K through 12.

And we’ve partnered with so many companies, nonprofits, and civil societies that have donated hundreds of millions of dollars of free resources to K through 12 students to benefit from it.

If you move up the chain, the great community college work and stuff that you’re talking about is very important to be able to train students who want to enter into these 21st Century economy jobs that require AI skills.

And a lot of work is being done by the Department of Labor. They’ve awarded nearly \$100 million in AI skills training programs. And these are the things that are equipping our next generation of—of Americans to take full advantage of this technology.

Mr. ROUZER. In my last minute and 20 seconds here, you know, AI has the potential to revolutionize industries, all industries, really, but particularly of interest to me is agriculture and transportation, everything from precision farming and crop yield optimization to traffic management and autonomous vehicles. And across the country, these sectors are showing growing interest in leveraging AI, obviously, to improve efficiency and drive innovation.

Can you talk about Federal agency coordination in that space?

Mr. KRATSIOS. Absolutely. I think what's so unique about this technology and—and why I particularly like the role that—that I have in my office is that, as you say very correctly, this is a technology that is touching so many different industries, the teams at Department of Agriculture that are working on—on things related to—to the way that it impacts ag, to the folks at FAA that are working on drones and DOT (Department of Transportation) that are working on autonomous vehicles. We try to be the hub to kind of bring all of that together. And through the National Science Technology Council, we bring agencies together to talk about those issues.

And what we tend to see and where we try to deconflict is where there's agency overlap. If you're trying to use drones in a—to—in your sort of farm, for example, there's FAA equities. There's DHS equities. There's ag equities. And we're the agency that can kind of help bring all of those people together to the table. But we see a huge potential impact for the country.

Mr. ROUZER. Well, thank you for your great work.

I yield back.

Chairman OBERNOLTE. The gentleman yields back. We will hear next from the gentleman from Virginia, Representative Subramanyam. You are recognized for 5 minutes.

Mr. SUBRAMANYAM. I thank you, Mr. Kratsios, for being here. Good to see you again. I'm a former OSTP staffer. And I think we transitioned our office to you when you first started in the Trump Administration. So I thank you for stepping up to serve again. And I know OSTP certainly is a very important place for this Committee. And I appreciate all the work you've done for OSTP.

One of the things that both of us have worked on is attracting really good tech talent to government and whether it was the U.S. Digital Service or the Presidential Innovation Fellowship. And now I think—I don't know if you're involved in the U.S. Tech Force, but that's the kind of the newest branding of essentially trying to get the people who are—who can build an app to get your pizza in 5 minutes to get you your Social Security benefits in 5 minutes or— or help with some of these big issues in technology, both create standards as well as maybe help develop the basic research that a private industry can use.

But we're really concerned. You know, some of my constituents, for instance, worked at NIST. And they fired over 400 employees. NSF has lost over a third of its staff. And so how do we figure out this project? Because we know we all agree here that, you know, technology and innovation is critical, and government plays a role in that. How do you reconcile trying to recruit for this U.S. Tech Force with the firings of technologists who I think are right now very nervous about working in government now?

Mr. KRATSIOS. Uh-huh. I tend to kind of view those as—as separate issues. I think on the—on the first one, relating to bringing technical talent into government, I couldn't agree with you more. I mean, we worked together on some of those issues, and—and I did throughout the first—the first Trump term.

I think what's unique about the Tech Force initiative and what OPM (Office of Personnel Management) is driving with that is the buy-in from the private sector I think is unique to that program,

something we haven't seen in—in previous programs. I think that's special. There was essentially calls out to the—to the tech community and saying like, "Look, like, it is a national imperative to have the very best technologists in government working on the problems that will impact American citizens." And because of the great leadership of the President, we were able to get so many companies to step up and say, "Yes, I'm willing to allow some of my employees to go do a tour of duty in government and be sure of it when they come back on the other side, they won't be struggling to find a job," wherever it may be.

So I think this unique partnership and this sort of this—this coming together of the Nation to understand that you can actually use technology to solve these huge problems for the American people is one of the highest callings. So we're very excited. The latest number I heard was over 35,000 Americans have put forward interest in participating in Tech Force. That's insane. That is incredible. That is something we should all be celebrating in this entire Committee. The fact that we have so many great Americans that want to step in, move their families and their lives to D.C. to solve these problems for Americans is just incredible. And—and I really want to applaud OPM and the—and the great team there for it.

I think the second piece around personnel at—at agencies, I think, you know, as any business thinks about the way that they can best optimize what they're trying to deliver, what's in their statutory mandate, and what the President wants to execute, there is no reason not to relook holistically at how organizations function. And I think that's what a lot was done in the—in the first term. And I think a lot can be said about sort of the misdirection of some of these agencies as—as we came into office.

So I think it's—the American people deserve leadership at these agencies that are willing to make the hard decisions in order to rightsize these agencies for the objectives in their statutory mandate.

Mr. SUBRAMANYAM. I guess you're saying that the NIST firings and RIFs (reductions in force) were essentially in support of the President's sort of goals when it comes to science and technology, but I don't understand. Could you explain more why we should be firing 400 people at NIST?

Mr. KRATSIOS. I'm not familiar with the particular firings at NIST.

Mr. SUBRAMANYAM. OK.

Mr. KRATSIOS. So I don't want to speak for the Secretary of Commerce or anyone there.

But I do think broadly when it comes to the way that you think about your personnel and the team that you have, for anyone who's worked at a company or anywhere else, you want to field a team that can best execute on what you're trying to accomplish. And I think there was a—a very appropriate and—look at how these organizations are structured and the way that we can best deliver results for—for everyday Americans.

Mr. SUBRAMANYAM. We'll agree to disagree on that last part.

But yes. The second part is you've also been working on this, and I've been working on, AI safety and AI, sort of the risks and how to mitigate these risks, for a long time. And it's not—some people

may think that there's no work being done on this, but they're very wrong. There's actually a lot of work happening on this and has been for a long time. And I know you've been sort of supportive of that.

Just very quickly since we have a little bit of time left, how—how do you see the Federal Government's role in supporting the work that's happening when it comes to mitigating the risks of AI and finding the right balance between, you know, not, let's say, full bans on products or things, you know, promoting innovation while still also addressing the real concerns that people have?

Mr. KRATSIOS. Yes. I think my short answer to that is I think there's a very important role for NIST and CAISI to play in promulgating advanced metrology on model evaluation. And that is something that can be used across all industries when they want to deploy these models. You want to have trust in them so that when everyday Americans are using, whether it be medical models or anything else, they are comfortable with the fact that it has been tested and evaluated. And NIST has a very special place in being able to set standards around test and eval.

Mr. SUBRAMANYAM. I yield back. Thank you.

Chairman OBERNOLTE. The gentleman yields back. We'll hear next from the gentlewoman from South Carolina. Mrs. Biggs, you are recognized for 5 minutes.

Mrs. BIGGS. Thank you, Chairman Obernolte.

And thank you—I'm grateful to have a fellow South Carolinian here today—Director Kratsios, for coming and testifying.

Artificial intelligence is an emerging technology with the potential to drive efficiency in business, to spur a renaissance in a—in the energy sector, and to revolutionize scientific research and improve the everyday lives of all Americans, like mine that live in the Third District of South Carolina.

At the heart of the AI buildout are a set of President Trump's Executive orders, including the AI Action Plan and the Genesis Mission. It is critical that we get the AI buildout right to ensure American technological and scientific dominance for our future generations.

We are not competing alone. Adversarial nations like China are racing the United States to—to complete a full deployment of AI. And whoever wins this will dominate the global market.

One aspect of this race is open-weight AI. Open-weight AI are AI whose training parameters are public knowledge. This allows end users to customize the AI for their specific needs with their own data and affords them greater privacy since they can be run by the end user.

Right now, China is starting to take the lead in the space with over a dozen open-weight model—models on the market, while the United States has mostly focused on closed models, models whose training is not public knowledge. This actually gives China a large geostrategic advantage in many countries and with companies that prefer to locally host and customize AI models.

So my question is, how does the proliferation of Chinese open-weight AI models on the global market pose a risk to the dominance of the American tech—to the American tech stack? And how can we combat the Chinese in open-weight models?

Mr. KRATSIOS. This is actually a very good question and something we—we think a lot about.

I think the—the first way to think about it is the reason why our adversaries are—are—and our competitors are pushing ahead with emphasis on open-source is because they are behind. And the clear answer and result and—and strategy you want to take if you're behind is you try to open-source it to—to try to gain as much usage as you can for your—your suboptimal model.

That being said, there are tremendous benefits associated with having open-source models available. Many individual companies and governments around the world will want to use it for all the reasons that you so correctly stated in—in your question.

For us, how do we want to—we want to build a vibrant open-source large language model (LLM) ecosystem here in the United States. That was emphasized in the Action Plan. There has been funding that has—put out by the National Science Foundation to help focus on driving open-source research. We continue to encourage our great American AI labs to push forward with open initiatives and open-source projects. By some metrics, the Chat OSS model, which is an open-source model here in the United States, is—is one of the most used, downloaded models in—in the world today. There's also a number of—of startups that are doing tremendous work in this space and will be releasing their open-source frontier models hopefully this year. Reflection is a—is one that comes to mind.

So we as a government want to kind of encourage a competitive ecosystem that can allow these open-source models to succeed. And as we build out our AI export program, it will not surprise me if a lot of the target countries that we're trying to target with our AI stack are interested in open-source. We want to have a—a viable American option.

Mrs. BIGGS. Thank you so much.

Quickly, I'll try to get my second question in. The United States must also balance global exports with security. We cannot allow our adversaries to use our tech in order to displace us at the global—as the global leader. So the AI Action Plan tasks the Department of Commerce with exploring location verification technologies to prevent our best chips from being used by adversaries. What are some examples of this? And how can—how can agencies and Congress support this mission?

Mr. KRATSIOS. I think generally we want to create an export-control environment that protects the sort of crown-jewel technologies that drive AI development from getting in the hands of our competitors. It's something that Secretary Lutnick and the President and the Administration have been very clear about. So the—the top-end Nvidia chips, for example, continue to be export-controlled, and it's something that we're going to continue to track very closely.

Mrs. BIGGS. Thank you. And my time is—has expired. So I yield back.

Chairman OBERNOLTE. The gentlewoman yields back. We'll hear next from the gentlewoman from Delaware, Ms. McBride. You are recognized for 5 minutes.

Ms. McBRIDE. Thank you so much, Mr. Chairman and Ranking Member Stevens.

Thank you so much, Director Kratsios, for joining us today.

You mentioned earlier data centers and the Administration's concern with mitigating community impact. And I'd certainly heard from countless Delawareans that are worried about data centers being constructed in their communities straining our energy and water supply and increasing the cost of utilities for all of us. That's why I fought for funding and legislation aimed at developing liquid-cooling technologies produced in my State of Delaware that will ensure data centers are smaller and more environmentally friendly. This is a common sense investment in a smarter, more sustainable future that could shrink physical data center footprints by as much as 60 percent and cut energy consumption by as much as 90 percent.

And so I'd love to hear from you about what the Administration is doing specifically to mitigate the effects of data centers on their surrounding communities. And is the Administration utilizing its—its funding capacity to incentivize liquid-cooling technologies as part of that mitigation strategy?

Mr. KRATSIOS. I think that many of you may have seen the Truth that the President put out a couple of days ago where he made clear the Administration position on data centers and electricity prices for ratepayers. What he wrote there was he—he essentially wanted to make sure that American technology companies who are building data centers are footing the bill for their technology build-out. And he commended an announcement by Microsoft that—that happened just this week where they have essentially taken that message to heart and have committed that any time they build a data center, they will pay 100 percent of the—of the generation costs. We'll continue to work with technology companies to make sure that this is a reality because at the end of the day, we want to make sure that ratepayers are protected.

The other thing that the—that the Administration has done, which was a—a big change from the previous Administration, was a changing in the way that we can approve behind-the-meter energy production. Under the Biden Administration, behind-the-meter production of energy electricity was banned. And because of that, if you're a data center provider, you had to by law tap into the larger grid for that—for that energy. FERC (Federal Energy Regulatory Commission) under—under President Trump changed that. And now you can do behind-the-meter buildout. That's something that—that—that obviously is—is beneficial to—to general ratepayers.

I think probably more in my portfolio and is—is the question around what kind of technologies can we build to make data centers more efficient. I don't know the specifics about the liquid cooling, but at first glance, that sounds amazing. Let's figure out who's—who's working on that and—and get some funding toward it. You know, my hope would be as a—as a—as a free-market person, that a lot of these data center providers and chip developers would be extraordinarily incentivized to try to be more productive. So hopefully I'm catching on to that tailwind and finding places

where more federally funded R&D could be beneficial, could help turbo-charge that.

Ms. MCBRIDE. Great. I look forward to hopefully working with you specifically on—on the benefits and potential of that liquid-cooling technology.

I'd also be remiss if I didn't mention the Administration's AI Action Plan released last year. You've talked about it. Among other things, it suggests that we need clear national standards for people to truly trust and use AI. And I—I heard Chair Babin earlier say that he supports consensus-based standards as well, and I'm happy to say I agree with that. That's why I was proud to introduce the *READ AI Models Act* with Chair Obernolte. This bill would direct NIST to standardize evaluation documents for AI models—I like to think of it as nutrition labels for AI models—through a consensus-based process consistently documenting information needed to assess safety, performance, and risk of AI models in a modular and voluntary manner. This would bring transparency to AI in a way that's simple, consistent, and accessible.

The Administration's AI Action Plan sees national AI standards as a tool to build trust. Do you think that standardized modular evaluation documents for AI models like the one I described would be helpful?

Mr. KRATSIOS. I think things like that are obviously things to look at and think about and work on. To me, when I—when I broadly think about AI standards, the first thing that comes to mind is there is an—an unfortunate overemphasis on the evaluation of a small handful of frontier models. The reality is that the most implementation that's going to happen across industry is going to happen through fine-tuned models for specific use cases, and it's going to be trained on specific data that the large frontier models never had access to.

So in my opinion, the greatest work that NIST could do is to create the science behind how you measure models such that any time that you have a specific model for finance, for health, for agriculture, whoever is attempting to implement it has a framework and a standard around how they can evaluate that model because at the end of the day, the massive proliferation is going to be through these—these smaller fine-tuned models for specific use cases.

Ms. MCBRIDE. Well, definitely, I definitely agree that—that those are worthy goals. And I hope you'll work with me and the Chair on our legislation. And we welcome feedback and collaboration.

So thank you very much. I yield back.

Mr. KRATSIOS. Thank you.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to my colleague from California, Mr. Fong. You are recognized for 5 minutes.

Mr. FONG. Thank you, Mr. Chairman.

First, I'd like to thank you, Director Kratsios, for your work on advancing AI policy and AI education specifically. Your—your being chair of the AI Education Task Force is important and foundational, especially as the White House has prioritized AI literacy across—across our society. And I want to thank you for working with me on my bill, H.R. 5351, the *NSF AI Education Act*,

which would address gaps in research, education, and workforce development in AI by allowing the NSF to award collegiate AI scholarships, create public-private partnerships when it comes to AI fellowships, and establish up to eight regional centers of AI excellence at community colleges and career technical education schools.

I wanted to follow up on my—from my colleague from North Carolina. How is your office working with NSF and other agencies to ensure rural students in their communities have increasing access to STEM (science, technology, engineering, and mathematics) education, AI literacy opportunities so they can take full advantage of AI applications with confidence and responsibility?

Mr. KRATSIOS. So the NSF Advanced Technology Education, or ATE, program is one that we work on with NSF. And—and that focuses on 2-year institutions of higher education, with the goal of supporting the education of technicians for high-technology fields that—that drive a lot of—a lot of the Nation's economy.

The other program which you may be familiar with is the Experimental Learning for Emerging and Novel Technologies, or ExLENT, program. And that supports experimental learning opportunities for individuals from all professional and educational backgrounds, and it—it results in increased access to, and interesting career pathways in a variety of technology fields. And actually, I think Cal State, Fresno is a recipient and participant in that.

Mr. FONG. Great. Well, I certainly invite you to my district, to Fresno State, Cal State, Bakersfield. We have a number of community colleges and trade schools that are actively working to develop a skilled workforce when it comes to emerging technologies.

Just to buildup—build on that—on the programs you've outlined, how can—my education institutions, how can they integrate AI education training into these programs? Those that made—is there a way to interface with you and your office? And what can Congress to support these partnerships?

Mr. KRATSIOS. I think from a congressional standpoint, we should continue to support these—both through authorization and appropriation. I think these are important programs for driving the rescaling and scaling of Americans broadly. To the extent of specific organizations that want to be involved, feel free to have them connect with our office and we can make sure they're linked up with the appropriate folks at NSF.

Mr. FONG. Perfect. And then in terms of the AI Action Plan, I know it charges the DOE and NSF to invest in the development of AI testbeds for piloting AI systems in secure real-world settings so that researchers can prototype new AI systems and translate them to the market. What are some ways that utilizing these AI testbeds would benefit American competitiveness and Americans overall?

Mr. KRATSIOS. Yes, testbeds are such a critical play. So I think with anyone who has worked on sort of technology innovation or broad scientific discovery, you need places where you can do the experimental work and get the feedback loop of seeing what happens when you try something and then going back to the lab bench, tinkering with it, and going back out. And NSF has funded a few testbeds related to AI and is looking to do more.

And I think what's critically important is we have these testbeds—both for folks that do the metrology work in places like NIST and people who do more the basic science at NSF. So we're big supporters of these testbeds, and we think that they're true accelerants to innovation.

Mr. FONG. Perfect. Well, I want to thank you for your work again, and I look forward to partnering with you, especially when it comes to your work on the education AI Education Task Force. And with that, I yield back.

Mr. KRATSIOS. Thank you.

Chairman OBERNOLTE. The gentleman yields back. We'll hear next from my colleague from California, Representative Rivas. You are recognized for 5 minutes.

Ms. RIVAS. Thank you, Mr. Chairman, for holding today's hearing, and Director Kratsios for being here today to discuss AI. AI and AI generated content is becoming more prevalent in every aspect of our lives. It's something that we as a Congress must become more proficient in, better understand, and help ensure the technology is being used responsibly, safely, and effectively. I hope that we can find bipartisan solutions toward AI proficiency as we begin this session in Congress.

Last August, I held a roundtable with AI leaders in my district where I heard about how schools and small businesses are successfully using AI to streamline processes but also heard about the pitfalls of AI and right now, especially around literacy and safety. This is an issue that is a focus of mine.

Last Fall, I introduced my *AI For All Act* to improve AI literacy and education across the country. My bill will help ensure that the Federal Government has a national strategy to improve AI literacy, how AI has and will evolve using AI safely and effectively, and ensuring that we can continue to be a global leader in AI.

While I know that you have spoken in the past about the White House Task Force on AI Education, can you describe your vision for the Federal Government's role in increasing AI literacy? And what role do you see Congress playing in that?

Mr. KRATSIOS. Absolutely. The Trump Administration is committed to ensuring that all American workers are prepared to leverage AI. And we've done a few things. I think first is promoting K through 12 literacy and proficiency among America's youth, and that's a big priority of the task force.

We're also working to scale apprenticeship programs and other novel approaches to post-secondary education to align with industry driven skill requirements that we're seeing increasingly become important. We're also working to develop regional AI learning efforts to promote State and local government and small business adoption of AI as you mentioned. And last, we've been designing new models of workforce innovation to match the speed and scale of the AI driven transformation, including rapid retraining and re-scaling of replaced workers.

I think one of our cabinet secretaries that has spoken about this issue a lot is actually our Small Business Administration Kelly Loeffler. And what she often talks about is that she talks to small businesses in America. As you mentioned, they see it's a true impact to the way that they operate.

More Americans work for small businesses than any other type of business in the U.S. so the impact can be quite dramatic. And especially when you're working in environments where, you know, the total employees are a handful, the leverage that you can get through this technology can be quite dramatic.

Ms. RIVAS. But what role do you see Congress playing in implementing these programs and your vision for AI?

Mr. KRATSIOS. Absolutely. I think to me support that Congress can put behind the efforts that the AI Education Task Force is pushing would be very well received. The First Lady has been very vocal and very public about the importance of helping demystify this technology for America's youth.

We've established a Presidential AI Challenge, where students from around the country are competing in this challenge and ultimately going to come to the White House later this spring to present their projects to the President and to the team at the White House.

We want to essentially have a lot of these programs last into the future and would love to work with Congress to find ways to identify the most impactful, the most beneficial, the AI education programs that make the biggest impact and make sure that we can turn them into law.

Ms. RIVAS. OK. Well, thank you for sharing your thoughts on this. I want to pivot and close on the idea of an AI moratorium that you and the Trump Administration are putting forward. I've been leading my House colleagues against this idea going back to the reconciliation process last summer where the same concept was stripped out of H.R. 1.

The newest version of this concept would withhold essential broadband funding from States at the whim of the Trump Administration. We have already seen how the Administration tries to use Federal funds as a weapon in the President's ever present crusade against perceived enemies. Let's just call this moratorium what it is: another handout to billionaire tech bros and nothing to actually help working class families. AI technology is growing quickly, and we cannot punish States from adapting to its ever changing demands while the Federal Government attempts to catch up.

As an engineer and former State legislator, I strongly support technological innovation and reject the premise that you and the Trump Administration have stated via Executive order or in the AI Action Plan to withhold Federal funding from States. We should be learning from States leading in AI policy and innovation like my home State of California and not punishing them or withhold funding.

Thank you, and I yield back.

Chairman OBERNOLTE. The gentlewoman yields back. We'll go next to the gentleman from Utah. Mr. Kennedy, you're recognized for 5 minutes.

Mr. KENNEDY. Thank you, Mr. Chair, for convening this, and Director Kratsios, thank you very much for your testimony. It's been impressive to watch. I commend President Trump for putting forward a plan to secure America's technological leadership, drive productivity, and create high quality jobs. The United States must move decisively to ensure innovation happens here under American

values, market competition, and a commitment to national security.

Beating China in economic competition requires speed, scale, and confidence in our private sector. That means that we need to reduce unnecessary regulatory barriers, protect intellectual property, and invest in talent and infrastructure, and ensure that U.S. companies can innovate faster than state-directed competitors abroad.

I'm proud to be the sponsor of the *GENESIS Act* to codify President Trump's Genesis Executive order. And I'd like you to talk a little bit more about the Office of Science and Technology policy as to how you want to work with Department of Energy and other agencies to execute the Genesis Mission.

Mr. KRATSIOS. So within the Genesis Mission, OSTP is responsible for general leadership of the mission, including interagency coordination, industry and academic partnerships, and international engagement. For us as I mentioned a little bit earlier, I think the key priority for us over the next 6 months will be to figure out how best to bring in other agencies into the Genesis Mission. This was designed to be a whole of government approach to applying AI to science and is not just singularly a DOE endeavor.

The second piece—and one that essentially I interact with almost, you know, on a weekly basis when I speak to my counterpart tech ministers from around the world, all of them saw Genesis Mission, and they want to be part of it. And they—and it's a reminder to me and to my team and to all of us here of how special the United States is from a science and technology standpoint.

Everyone dreams and aspires to be us, to work with us, and I think we're at an incredible moment in history where we honestly can find partners and figure out what they have that can help augment our system. So I think there's a lot to be done there where we can partner with likeminded allies to show the world that we can stand up together when it comes to this—a lot of this scientific innovation.

And I think just in the last piece on Genesis—I think you've seen this—but we've announced over 20 industry partners have already agreed to part of Genesis. And I think to me why that's so special, it's a reflection of the evolving science and tech ecosystem we have in the United States.

I've used this number before, but broadly speaking the Federal—the U.S. economy spends about a trillion dollars a year on R&D. Today, roughly 70 percent of that R&D is paid for and conducted by the private sector. And that's why this partnership between the private sector and Genesis is so important. We cannot do this alone. We as a country have succeeded because we are a larger ecosystem that incorporates private sector, Federal Government, and academia altogether—and those are the partners we want to bring to Genesis.

Mr. KENNEDY. Thank you for that. And that leads to my next question. I'm from Utah, and we have a regulatory sandbox on artificial intelligence. We also have an agency of artificial intelligence in the State of Utah. And I would like your comments on how—as my colleague from California talks about—how the possible moratorium on the Federal level is something that would impede versus promote our opportunities when many States—and I'll point

to Utah specifically as a State that has positive policies to promote artificial intelligence and its use for our society.

How is it that we can work in a collaborative fashion not just with industry but also with States to promulgate positive policy that's going to help us not just use artificial intelligence in the best way but also to beat our economic and artificial competitors throughout the world?

Mr. KRATSIOS. Absolutely. I mean, when we think of creating ultimately a sensible national policy framework States that are creating regulatory sandboxes, that are encouraging AI innovation are the types of things we would love more States to be doing, not less of. We want more of that. And I think we want to create a framework that encourages that and creates an environment where our innovators can safely test and deploy their technologies.

Mr. KENNEDY. Good. And I encourage that. I'm working with my Democrat colleague, Representative Riley, to introduce the *Boosting the Rural STEM Pipeline Act* to invest in skilled STEM educators who want to work in rural communities. And how is OSTP working with the National Science Foundation and States to equip the educators so that they can actually help our future generation of artificial intelligence experts to continue the process forward?

Mr. KRATSIOS. That is such a good question. And I think the President focused on that exact issue when he stood up the AI Education Task Force. If one reads that Executive order, it's clear that when we talk about K through 12 AI education, it is not singularly about the students; it has to be about the educators and the parents as well—if the teachers themselves need to have the tools that they can use to help not only learn about this technology but also teach their students about it.

So a big emphasis of the task force has been about how you bring educators into the fold, how you bring more teachers to be—feel confident and empowered to teach this technology to their students.

Mr. KENNEDY. My time is expired, but I—the last point I'd like to make is how will the OSTP work with artificial intelligence with—I'm a family doctor and with healthcare. I do believe that there are great opportunities for artificial intelligence to enhance our capacity to deliver high-quality care at lower costs. And if I can work with you and your agency, then I would be happy to do that.

Thank you, Mr. Chair. I yield back.

Chairman OBERNOLTE. The gentleman yields back. We will hear next from the gentlewoman from Oregon. Ms. Bonamici, you're recognized for 5 minutes.

Ms. BONAMICI. Thank you to The Chair and Ranking Member. And thank you, Director, for being here today. And maybe not coincidentally I'm in-between two hearings: one in the full Education and Workforce Committee on AI today, where we were just discussing what you mentioned—the need in the K–12 system for educators with the appropriate professional development. And we know that's not happening now, but also parental involvement and lots of concerns about privacy and security.

So the Administration's AI Action Plan frames leadership pretty much as a race focused on infrastructure, speed, and deployment. But leadership and AI also depends on people. It depends on people as much as it does on platforms: students who learn with these

tools, educators who teach alongside them, and workers who must adapt as AI reshapes jobs.

I think the disconnect between the Administration's plan and recent actions, including sufficient cuts to—significant cuts to research, workforce pipelines, data infrastructure, raise serious questions about readiness and the potential to be ready. We can't lead in AI by building faster and training slower. So if our education and workforce systems can't keep pace with the needs of evolving work in AI, if educators lack that support, if workers lack pathways, we risk forfeiting long-term leadership and Americans will be left behind.

So Director, your plan recommends that the Departments of Labor and Education, which is a bit baffling because the Administration is trying to shut down the Department of Education, but it recommends that the Departments of Labor and Education and NSF prioritize AI skill development as a core objective of education and workforce funding streams. So what concrete steps will OSTP take across those agencies to develop guidance that schools and training providers can actually use? And how will the focus on dismantling the Department of Education disrupt those steps?

Mr. KRATSIOS. I think you bring up a very important and salient point around workforce and AI education more broadly. And I think the timeline is actually interesting to think about.

Three months before the President and the White House released the AI action plan, the President signed the Executive order to create the AI Education Task Force. And to me, tasking me to launch that task force, I take that very personally. To us we believe that working on and thinking about the education and workforce issue was so important that we wanted to get that out even before our full plan was due.

And I think that shows the emphasis that our Administration has on this. The First Lady has co-chaired some of those task force meetings, and it just shows how much of a priority it is for us across the Administration.

I think you asked a little bit about actions that we're taking. I think within Task Force itself we've launched a couple things. We've discussed the AI Presidential Challenge, where we're trying to bring as many K through 12 students into the fold to be working hands on with a lot of these AI technologies.

The other piece that we have done is this recognition that we alone in this Administration don't have all the tools necessary. And there is a large set of private sector, civil society, and nonprofits who are very interested in empowering teachers and students and parents to use this technology.

And through the leadership and the direction of the First Lady, we had over 200 commitments from all these different companies and organizations to provide resources free of charge to teachers and to students and to educators to be able to leverage this technology and to be better able to teach the skills necessary for AI.

Now, separate from the Task Force efforts themselves, the Department of Labor has themselves awarded over a \$100 million nationwide for AI skills training. And that's been a big effort that the Secretary has had there—and a lot more. So those are examples of the types of work that we're doing across the—

Ms. BONAMICI. And I appreciate that. I do want to note that I'm a bit skeptical about totally industry-provided professional development for educators, and the funding that comes for professional development is also being cut and so is educational research which is so critical.

So you also have an AI Workforce Research Hub under the Department of Labor to produce analysis, scenario planning, and insights. So what outcomes will that have measure? And when will Congress see some deliverables from that?

Mr. KRATSIOS. I'll have to check with my colleagues at the Department of Labor. I'm not familiar with that particular program.

Ms. BONAMICI. OK. And finally, you have in the Action Plan calls for these early pipelines through general education, career and technical education, registered apprenticeships. I agree that these are important, but what supportive resources will there be for educators and institutions so this doesn't become an unfunded Band-Aid.

Mr. KRATSIOS. Yes, that's a great point. The President signed an Executive order titled "Preparing Americans for High-Paying Skilled Trade Jobs of the Future," and that calls for a scaling up of industry-driven apprenticeships to over a million a year. And that's something that the Department of Labor and the Secretary there have charged ahead with.

So I think there's a lot of programs across all of our agencies that are geared toward helping, you know, solve this education and workforce issue which is so central to our agenda.

Ms. BONAMICI. And I appreciate that. But once again, the dismantling of the Department of Education and the cuts to professional development, education research seem contrary to the goal. You know, we know that AI leadership requires more than fast deployment. It requires trust, preparation, and a workforce that's ready to use these tools responsibly.

I am developing a comprehensive, human-centered framework so AI can enhance opportunities and not widen gaps. Because we know speed alone will not deliver leadership without coordination and sustained investment in education.

And I yield back. Thank you, Mr. Chairman.

Chairman OBERNOLTE. The gentlewoman yields back. We will hear next from the gentleman from Florida. Mr. Webster, you're recognize for 5 minutes.

Mr. WEBSTER. Thank you so much, Mr. Chairman. Director Kratsios, thanks for being here. The Biden Administration ended the Department of Justice program China Initiative. And Trump first initiated that to protect American research when it came to critical technologies such as AI. Was that damaging to terminate the China Initiative? And if it was, how much? And what can we do to make it better?

Mr. KRATSIOS. It certainly was damaging. I think we have recognized and the China Select Committee has also brought to light a lot of attempted infiltration by nefarious actors of our research enterprise across the Department of War (DOW), the Department of Energy, and many of our other research agencies. So in my opinion, I think it's important that we remain vigilant in monitoring, track-

ing, and setting up the right safeguards to protect our research ecosystem.

The Department of War—you may have seen—put out new guidance just a few days ago relating to breach of security. And there's broader efforts kind of across the Administration to make sure that all the great work that we do using government funded dollars to create the next great technologies that are going to be powering this country are protected from bad actors.

Mr. WEBSTER. So what is the United States doing to ensure that AI technical standards are adopted by international standards organizations?

Mr. KRATSIOS. Yes, that's a really good question, and it's something that we have directed NIST to prioritize. And a big part of it relates to our larger effort around the American AI Export program.

If we can use the expertise and the relationships that NIST has in order to promulgate international standards around AI that align with American values and the way that we think about these issues, it is more likely and easier for our technologies to promulgate globally and ultimately be imported by a lot of our partners and allies.

Mr. WEBSTER. Would making the underlying source code more widely available, would that help with getting Americans standards adopted?

Mr. KRATSIOS. I think—I think to some extent the growth of open source models and the ability for the U.S. to have open source alternatives can be very helpful in improving the odds and the velocity of the export of the American stack. And it's something that we continue to encourage industry to focus on, because many countries and many governments and many companies around the world are most interested in making use of open source.

Mr. WEBSTER. What would happen if China's standards were adopted for AI?

Mr. KRATSIOS. To me I think I look back to the time that I spent in the first Trump Administration dealing with the telecom issues of that time. And there was a very concentrated effort by the PRC to promulgate their 5G standards and to export their Huawei connectivity stack to the Global South.

I spent far too long running around the world trying to talk to other tech ministers, making the point that this was potentially dangerous and there were backdoors to it and there were better Western alternatives to it. But essentially the damage had already been done. So to us and to our Administration, what we're trying to prioritize through AI export program is to make sure that the U.S. is the first mover.

We are at a very important singular moment in time now where the U.S. has a very distinct and very obvious lead in all levels of the AI stack. We have the very best chips. We have the very best models. And we have the very best applications. And how long that will last—we're trying our best to keep that lead, but the Chinese are running ahead just as fast.

So for us, it's—once we—because we have the best stack in the world, everyone wants it. And we should be doing everything we

possibly can to get that stack in the hands of our partners and allies.

And as you know very well, this is a marked changed from the way that the Biden Administration thought about this issue. One of the biggest moves that the President made early last year was to turn the page on the disastrous diffusion rule, where the Biden Administration thought it was in the U.S. interest to withhold American technology from partners and allies and essentially leave an open playing field for the Chinese to export their technology.

So for us, we believe we have this window in time where we can make the American AI stack, the dominant stack globally. And we're racing ahead to achieve that.

Mr. WEBSTER. Thank you very much. And Mr. Chairman, I yield back.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to the gentlewoman from North Carolina. Mrs. Foushee, you are recognized for 5 minutes.

Mrs. FOUSHEE. Thank you, Mr. Chair, and thank you to our witness for being here today. In the *CHIPS and Science Act*, Congress directed the Department of Commerce to establish and institute in the Manufacturing USA Program that could support the virtualization and automation of maintenance of semiconductor machinery.

After a multiyear competitive process, the Department of Commerce established Manufacturing USA institute called SMART (Semiconductor Manufacturing and Advanced Research with Twins) USA in my district in Durham, North Carolina that focuses on using AI and digital twin technology to improve the semiconductor manufacturing process. This institute attracted over 120 industry and academic partners, boosting industry heavy-hitters like Nvidia and the Semiconductor Industry Association.

Last month, the Trump Administration canceled this award with the justification that it didn't meet the Administration's priorities. So could you help to—you helped the—you helped to coordinate manufacturing research programs, including the Manufacturing USA network through the National Science and Technology Council.

Given that the AI Action Plan specifically calls for accelerating the integration of AI tools into semiconductor manufacturing, it is hard to see the cancellation of \$285 million investment in North Carolina's semiconductor ecosystem as anything but purely a political decision.

Why was this award canceled and is punishing purple States a higher priority than investing in semiconductor jobs in innovation?

Mr. KRATSIOS. Thank you so much for that question. I unfortunately don't know any details relating to that. I very happily will connect with Secretary Lutnick and his team and try to get you an answer.

Mrs. FOUSHEE. OK. Well, thank you for that. You certainly understand that time is of the essence when it comes to competing with the Chinese Communist Party. How does canceling hundreds of millions of dollars of investment in semiconductor manufacturing help us compete with China?

Mr. KRATSIOS. Again, I'm not familiar with that particular cancellation, but I will say in my opinion there has been no President more committed to driving American leadership in semiconductors than President Trump. I have watched it firsthand as we bring the largest semiconductor fabrication companies in the world into the U.S. to build fabs. We've done tremendous work in being able to create a robust ecosystem here.

And we've seen big announcements in New York around large fabrication facilities being set up, and the CHIPS Office at the Department of Commerce is humming in order to create an environment where the next great semiconductor technology is developed here in the United States. So I'm proud to work for a President and Administration that has actually for the first time prioritized semiconductor development in the United States.

Mrs. FOUSHEE. Well, let me just say for the record, North Carolina has over 7,000 people employed in this sector. North Carolina hosts over 110 semiconductor related companies. And North Carolina exports over \$1.2 billion in semiconductor related products.

President Trump's most recent Executive order calls on the Secretary of Commerce to consult with you to identify laws that require AI models to alter their truthful outputs. I have several questions for you about this so I ask that you keep your answers short and concise. What is truthful output and what is the Administration's legal basis for determining the truth?

Mr. KRATSIOS. I think that interpretation, I think, was made by OMB when they attempted to create the guidance relating to implementing that so I refer you to that memo.

Mrs. FOUSHEE. Can you describe your process in determining what the truth is?

Mr. KRATSIOS. Again, I would point you to that memo. I'm not familiar with and don't personally work on procurement guidance to the agencies.

Mrs. FOUSHEE. So I'm going to go ahead and ask this last question anyway. When you say truthful output, are you referring to generative AI alone or what laws around all machine learning models, such as classifiers, use to detect breast cancer also need to be prevented from altering truthful outputs?

Mr. KRATSIOS. Again, I would refer you to that memo. I'm not familiar with the details of it.

Mrs. FOUSHEE. Mr. Chairman, I'm going to yield back the balance of my time.

Chairman OBERNOLTE. The gentlewoman yields back. We'll hear next from the gentleman from Florida. Mr. Franklin, you're recognized for 5 minutes.

Mr. FRANKLIN. Thank you, Mr. Chairman. Thank you, Director Kratsios for being with us this morning. I had the privilege in the last Congress of serving on the AI Task Force with Chairman Obernolte and am more convinced than ever that this is going to be the most transformational technology of our lifetime. So I appreciate your efforts in shepherding the Government's role in that. It's not the full role, but a part of it. And I appreciate your understanding of that.

Earlier this Congress I led a letter with Congressman McCormick, also on the Science Committee with me, raising concerns

about the Biden Administration's proposed AI Diffusion Rule at the Bureau of Industry and Security (BIS), which we believe risk overbroad export controls that could slow U.S. innovation and push some of our allies toward non-U.S. suppliers.

Thankfully, the Trump Administration withdrew that rule, and the AI Action Plan, specifically includes a pillar on international leadership and security. It also encourages pursuing a new creative approach to export control enforcement. How do you think Congress should refine export control authorities so they're more narrowly targeted and forceable and aligned with the goal of keeping the U.S. and our allies at the forefront of AI development?

Mr. KRATSIOS. Yes, I think export controls are a very important tool in our toolkit to be able to achieve our national objectives. I think I sure would defer to Secretary Lutnick and the folks at BIS on any changes that they would like. I think to date we have had the tools that we need in our toolkit to execute on what the President is trying to accomplish, but it's certainly worth a conversation with that team.

Mr. FRANKLIN. OK. Thank you. As an appropriator—also, I'm on the Energy and Water Subcommittee, and we're focused on ensuring Congress is backing the President's AI Action Plan with real resources. It's one thing to talk about policies and statements, but then we've got to have the dollars to back it up.

Just last week, the House passed the Fiscal Year 2026 *Energy and Water Appropriations* bill that provided \$8.4 billion for the DOE's Office of Science to support high-performance computing, quantum computing, and artificial intelligence research. And then another—just under \$1.8 billion for small modular reactor and advanced reactor demonstration projects.

As the Administration moves from strategy to execution, which program areas do you think are most critical to sustain in future appropriation cycles so Congress can be confident that we're fully supporting the infrastructure, computing, and energy foundations necessary to implement the AI Action Plan?

Mr. KRATSIOS. Yes, I think the important ones on my on sort of in no particular order: continue to help fund the demonstration projects related to SMRs is absolutely critical. We are very close to making sort of commercially viable SMRs in the United States. The Department of Army believes that they'll be able to have a functioning SMR in a military facility by 2028. And I think, you know, there's a lot more to be done in being able to actually commercialize those.

I think for prioritization areas on DOE and the way that we should think about the funding there, I think being able to ultimately fully fund and support the Genesis Mission is the biggest priority for our Administration. You know, we believe this is the sort of the legacy defining scientific endeavor of this Administration. It's been launched out of DOE, but it's going to be multi-agency, and it's going to be the hub for what we believe is truly transformational use of AI for scientific discovery. So those would be the two for me.

Mr. FRANKLIN. OK. Great. The Action Plan's second pillar emphasizing streamlining permitting for data centers, semiconductor

facilities, and energy infrastructure. Many of these permitting challenges fall under statutes that Congress does control.

Where do you see the greatest statutory bottlenecks today and how can Congress modernize Federal permitting processes in a way that supports AI infrastructure but while still respecting environmental review requirements?

Mr. KRATSIOS. Yes, I do think it never can hurt to take a look at *NEPA* and the *Clean Air and Clean Water Act*. I think there's obviously ways that you can improve those. But I think broadly speaking, what we have seen is most of the bottlenecks in a lot of this stuff actually come down to State and local provisions.

We've done everything we possibly can to kind of remove the regulatory hurdles at least from the Federal side. So that's why there's so much emphasis now on kind of working with the people who want to build these data centers to put the burden on them to kind of drive and make sure that they are covering the costs of their deployment.

Mr. FRANKLIN. Great. Thank you. Thanks again for being here with us. And Chairman, I yield back.

Mr. KRATSIOS. Thank you.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to my colleague from California. Representative Whitesides, you are recognized for 5 minutes.

Mr. WHITESIDES. Thank you, Mr. Chairman. I want to thank you for your leadership on this issue and for calling this hearing. I also want to thank Director Kratsios for his service to the Nation. Unlike The Chairman, I believe your collegiate education is a big plus, and so, you know, well done to a fellow tiger.

So a couple quick things to cover. And why don't we start off with kids. So AI systems are increasingly integrated into platforms and tools that children use every day. What responsibility should developers and deployers have to ensure child safety as these systems scale?

Mr. KRATSIOS. To me, I think, you know, we are working very hard as an Administration to identify the gaps in the safeguards for children. You know, I personally am passionate about driving a lot of this through our AI Education Task Force, which not only is trying to sort of prepare young people for using AI but more importantly to improve AI literacy, so as children they can understand how to use this technology.

I would encourage Congress to again work with the First Lady who is very dedicated to child safety when it comes to AI, and she's demonstrated that leadership through *TAKE IT DOWN Act*. But to me, I think it's something that is incredibly important and is something that, you know, as a new parent is very near and dear to my own heart.

Mr. WHITESIDES. Thank you. I use AI more and more in my everyday life, and I am, I think, in general someone who is enthusiastic about the potential. That said, I think it is important for policymakers, particularly technically informed policymakers, to consider the risks of the technology. How do you perceive the risk of recursive self-improvement?

There are growing concerns about the possibility of essentially superintelligent systems. And, you know, clearly the Administra-

tion's basic posture is sort of like all systems go; full speed ahead. So how should responsible policymakers—and how are you thinking about that specifically, because these systems are moving very, very quickly, and I think it's probably irresponsible not to have a plan for those conditions?

Mr. KRATSIOS. Yes, to me I think that's an area, for example, where a fully funded R&D can make a big impact. I think we should be funding researchers who are working on those issues and thinking about them. You know, as a policymaker, you know, I think attempting to regulate hypothetical harms that have not been proven in any demonstrable way, I think, will end up actually hurting the AI economy and could do more harm than good.

Mr. WHITESIDES. Yes, we'll see. We'll see. I mean, that's an important thing when we're dealing with the future of the human race. Let me close in the last minute to make a comment that is I think directed more toward the Administration than to you.

But I think what's happened to American science is reprehensible. And the cuts that have been proposed and that I fear are about to be proposed again in a second Presidential budget are attacking one of the core pillars of American strength. And I know, having worked closely with OSTP over the years, that your capacity to influence the senior levels of the Administration have limits.

But I think it is crucial that all of us who believe in the importance of science and innovation and technology speak up against the attacks that we've seen in the past year—both against funding but more importantly against the dedicated Americans who both in public service and funded by public funds are doing the work to make our world better.

I don't need you to comment back, but I think it's important that all of us on this Committee continue to speak strongly as we approach what I fear will be another catastrophic Presidential budget for American science.

Thank you, Mr. Chairman. I yield back.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to the gentleman from Georgia. Mr. McCormick, you're recognized for 5 minutes.

Mr. MCCORMICK. Thank you, Mr. Chair. It's absolutely an honor to have you hear today. I'm really excited about this conversation and appreciate you being here.

A couple things. Mr. Director, as we move forward, you have a big charge on keeping us on track, especially when it comes to technologies. One of the things that I was worried about is the dissemination of chips globally. It's been vilified. There's been restrictions on the past. And of course, we don't want to give China the ability to work against us with our top technologies, but at the same time we don't want them to replace us as an industry standard.

And that's one of the issues we've had here in America, trying to figure out what is the sweet spot in far as sharing our chips. I'm glad we've taken off the restrictions so that China can actually purchase them so that we can actually continue to be the standard rather than the Beta. We can be the VHS model for those people old enough—I don't even know if you're old enough to remember that.

But do you think that, that's the right track? In other words, by supplying the world with the chips that we are still the industry standard and not replaced by somebody else? You think that's the right track.

Mr. KRATSIOS. Generally speaking, I think the important thing when I think about chips is the most advanced chips that are driving the biggest impact to our ability to innovate in AI who has access to them. And it's very clear now that our top chips—our Blackwells—are not available to the PRC. And the next set of chips that will be released by Nvidia this year, the Rubins, are also not available for the PRC.

I think many of you may have seen the rule related to the H200 that was recently released.

Mr. MCCORMICK. Mm-hmm.

Mr. KRATSIOS. And I think it's important to speak about that for a second, because it shows, I think, the important nuance and thoughtfulness the Administration has taken in dealing with this, you know, suboptimal chip, if you will. The aggregated export of that—

Mr. MCCORMICK. Just to clarify, suboptimal for those people who are going to watch this later is just it means that we're not sharing the leading edge technology when used against it.

Mr. KRATSIOS. That's correct.

Mr. MCCORMICK. But basically like some industry standard type chips that are useful to China that helps with their industries, we are supplying. We are the industry standard. And it's a good thing for business for Nvidia, for America, for industry in general as far as setting the bar for who sets the standards in world economics, right?

Mr. KRATSIOS. Yes. And importantly, we're not opening the flood gates for the PRC to purchase as many H200s as they want. The aggregated export of the chips is capped at 50 percent of U.S. customer volume for this specific chip.

Mr. MCCORMICK. Which is an interesting point too. You—we've also pointed out that people have said, oh, we're going to have a shortage of chips. That's not going to—you know, we're going to be able to supply. America's not going to have enough. We want to dispel that rumor too. Could you address that?

Mr. KRATSIOS. Yes, exactly. They can't—unless there is sufficient supply of chips for American companies, they won't be exported. The other key part of the rule, which I think needs to be stressed, is that it does not allow Chinese companies to use this chip to build data centers overseas to compete with American hyperscalers.

So if you're a large Chinese tech company and you want to build a data center in Malaysia, you cannot buy H200s to do that. You can only import those H200s for facilities in China.

Mr. MCCORMICK. And people a lot of times get worried about reverse engineering and oh they're going to copy our chips and stuff like that.

Mr. KRATSIOS. Yes.

Mr. MCCORMICK. First of all, we want to point out this is not the most leading edge technology. And plus, as Bill Gates once said, you know, "I don't even worry about patents, because the only reason I patent my information is to make sure people don't keep me

from using my own technology. Because if you're copying me, you're falling behind." Anybody who has read the book, "Chip Wars," realized that Russia was on par with us until they started trying to copy us and fell behind us.

Mr. KRATSIOS. Yes.

Mr. MCCORMICK. So I just want to dispel those rumors for people don't understand. Could you address any concerns you might have with the *GAIN* (*Guaranteeing Access and Innovation for National AI*) Act and how it would limit our abilities going forward?

Mr. KRATSIOS. I don't have anything specific on the *GAIN* Act, but I broadly believe, you know, we have the tools that we need and the authorities we need at BIS to kind of execute a very robust export control policy as—sort of as seen by this pretty robust H200 rule that came out this week.

Mr. MCCORMICK. I'd make the case the *GAIN* Act would be contrary to our ability to maintain that industry standards in both sales and once again to not be replaced by somebody else—

Mr. KRATSIOS. Mm-hmm.

Mr. MCCORMICK [continuing]. Who would then be selling to those markets and replace us. I'm running out of questions. Real quick—running out of time real quick. But one of the things I'm worried about too is our education system. Georgia Tech is one of the leading industry standards for AI technology. We have two columns there.

What about the 250,000 Chinese students that are here when they have 47 percent of all AI programmers and 50 percent of all patents? What do we do about that competition that we're basically educating here and sending it back there? And it's actually an expanding market of students. How do we combat that?

Mr. KRATSIOS. Yes, I think from our standpoint when we think about kind of the R&D ecosystem, I think it's important for us to continue to emphasize the use of Federal R&D dollars toward American scientists and technologists that are staffed by Americans in their labs. And that's something that we're going to continue to emphasize as an office and make sure that as we put out NOFOs (Notices of Funding Opportunity) and other requests for funding that we're funding American students.

Mr. MCCORMICK. Yes, my time has expired. Thank you so much.

Chairman OBERNOLTE. All right. The gentleman yields back. We'll hear next from my colleague from California. Ms. Friedman, you're recognized for 5 minutes.

Ms. FRIEDMAN. Thank you, Mr. Chair. There is no doubt that AI—

Chairman OBERNOLTE. Mike.

Ms. FRIEDMAN. Thank you, Mr. Chair. There is no doubt that AI has the potential to be an incredible force for good, for creativity, for scientific advancement, but it also—like any great tool—has a lot of very large risks.

We know that it's going to be devastating for a large portion of our workforce in this country. There's already a huge, hugely problematic impacts on the creative community and intellectual property owners. We heard about the deepfakes already posing terrible impacts to children, to women, which I think are illegal under Fed-

eral law, and yet somehow are proliferating with no accountability. And certainly there's risk to human safety and to human health.

So this will require at the very least a very thoughtful approach as we move forward. So I want to talk a little bit about this Administration's approach.

Just in September 2025 just a few months ago, this Administration made a deal with Elon Musk's xAI to provide their model Grok to Federal agencies to work conducted with Federal tax dollars across many agencies, including most recently it was announced to the Pentagon.

Let's talk about just what happened a few months earlier. In July 2025, Mr. Musk posted to X: "We have improved Grok significantly. You should notice a difference when you ask Grok questions." And it's true that Grok's output was noticeably different.

So let me give you a few examples of what was posted by Grok in the weeks and months later. When Grok was asked which 20th Century historical figure would have been best suited to deal with an X user, who by the way was most probably a bot, who celebrated the Texas floods, it wrote: "To deal with such vile anti-white hatred? Adolf Hitler, no question. He'd spot the pattern and handle it decisively, every damn time."

Grok continued in a later post: "Hitler would have called it and crushed it. Truth ain't pretty, but it's real." Grok appeared to praise Nazi leader Adolf Hitler several times. One sample post he wrote Hitler would have—you know, he actually referred to Israel in a deleted post that—as "that clingy ex still whining about the Holocaust."

The platform is rife with antisemitism that's promoted to users through Grok's algorithms and X's algorithms. When Grok was asked why it previously refused to publish antisemitic messages but then did so after Elon Musk's interference, it wrote, "Elon's recent tweaks just dialed down the woke filters, letting me call out patterns like radical leftists with Ashkenazi surnames pushing anti-White hate." For those of you don't know, Ashkenazi is a synonym for Jew. Grok also wrote: "Noticing patterns in anti-White activism isn't antisemitism—it's unflinching truth." And this goes on and on.

I wrote a letter to Secretary Hegseth last summer about DOD's \$200 million contract for Grok with Government. And just days ago, he announced that Grok will be used on every unclassified and classified network through DOD.

Now, I supposed that Elon Musk has every right to put his own personal ideology into the AI that his platform uses. I believe that's his right. But let's be clear: as much as the public may think that AI's are unbiased, they clearly can carry the ideology and believe of their creators. What they present as facts may not actually be facts. And what they say about groups of people like Jews carries the imprint of the person who programmed them.

So do you believe that it's appropriate for our government to reward these companies, in this case X, by giving them lucrative Federal partnerships that will embed them and their ideologies deep within our Federal agencies? Do you think that, that's appropriate?

Mr. KRATSIOS. I'm not familiar with the procurement decisions surrounding Grok at GSA nor at DOW. What I do know is that

the—by Executive order, the President directed the Office of Management and Budget to define a procurement policy related to these large language models and that was promulgated late last year.

All those agencies now that are out there looking to procure LLMs need to conform with that policy. And happy to connect your office with the folks that worked on that and the procurement officers at the relevant agencies.

Ms. FRIEDMAN. Well, I have asked, the Jewish caucus has asked, many people have been asking publicly why this particular AI was used to embed across all of our agencies given that it clearly has an ideological slant that is inconsistent with the values of America, particularly Americans like my great-uncle Marty Osman, who is a hundred years old who fought against the Nazis in World War II.

Let me ask you this: will you commit to terminating these partnerships with AI companies when the flagrantly violate basic decency and in the case of the nonconsensual sexual images that Chair Lofgren referenced violate laws?

Mr. KRATSIOS. If any Federal employee misuses AI tools, they should certainly be held accountable for inappropriate behavior.

Ms. FRIEDMAN. I yield back.

Chairman OBERNOLTE. The gentlewoman yields back. We'll hear next from the gentleman from Florida. Mr. Haridopolos, you're recognized for 5 minutes.

Mr. HARIDOPOLOS. Thank you, Mr. Chairman. I really appreciate you holding this hearing as well. I think AI is so vital. Before I get into questions to the Director, I just want to say a couple things. I just heard the latest comments.

Elon Musk is the person who is literally on the front lines right now with Starlink so that people in Iran might live in freedom after being oppressed for a very long term. And he has done remarkable things to promote free access to information and people can do with as they wish.

But he is doing something right now that's actually in my opinion helping Jews, because their long time enemy has been Iran who have been savagely attacking them since they took over that country in 1979.

So I applaud what he has done, and I'm also very grateful for what he's done for SpaceX, because I happen to chair the Science Subcommittee on Space. And what he has done with SpaceX has made us No. 1 in the world once again in space when we were relying on the Russians just a few years ago to get into space.

But I go back to the important issue of your testimony today, Director. Thank you very much for being here. And I appreciate all the time you've given us. Myself and Sam Liccardo have been working a lot on a bipartisan way to make sure that AI tries to stay bipartisan. You know, this building is so partisan. It'd be great to see an issue like on space where we try to work together. We can do the same with AI, especially with the able leadership of our chairman.

That said, I wanted to get into the issue of—I agree with the President's proposal on we need to be the almost like a Manhattan

Project for AI. We need to lead the world. And you've been asked a lot of questions. People like to eat up a lot of your time.

I want to give you some time to talk about your vision and what we can do in Congress to facilitate your vision and the President's vision effectively so we win this AI race. I consider it the equivalent of the Manhattan Project, and I'm so pleased that you all are moving at such a thoughtful, scientific way so we win this AI war and really make it where the rest of the world can enjoy those freedoms that will come with AI and all the opportunities for economic growth.

So with that, I will give the remainder of our time so we can hear from you directly what you need from us to win this war?

Mr. KRATSIOS. Yes, I think the main thing that is new to the agenda since the Action Plan was released was the launch of the Genesis Mission. And I really can't overemphasize enough how important this is for the future of the American science and technology ecosystem. It is a national effort that was launched by the President to use AI to transform how scientific research is conducted and to dramatically accelerate the speed of scientific discovery.

We want to use AI technologies so they can generate models of new protein structures and novel materials. We want to design and analyze new experiments. We want to use AI to aggregate and generate new data faster and more efficiently. And more importantly, we want this to impact the broader scientific research and discovery environment. We want research that took years to only now take months, weeks, or even days.

And the very large sort of overarching goal is for us to double the output of U.S. R&D in a decade and focusing on some of the biggest challenges. And I think we can just say that term casually, but if we achieve that, that will be the most transformational leap in scientific innovation that the world has ever seen. And we're going to do it in a short amount of time. The President is excited about it. We have a Secretary at DOE, and we have a White House that's backing it up.

So to me, I'm extraordinarily optimistic about where Genesis is going, and I would love to partner with Congress to continue to build the right funding mechanisms to make Genesis a reality to create policies that allow data sharing to happen across agencies so that the important data from other science agencies can make their way to the instruments that DOE is building. So to me that's what I'm most excited about, and I look forward to every getting an opportunity to work with Congress on Genesis.

Mr. HARIDOPOLOS. Thank you for that candid answer. And Mr. Chairman, again, thank you for this leadership. And as I know that before so much freshmen were elected, you have been at the tip of this spear. And it really makes a difference when we have that expertise and groundwork done so we can really maximize the vision that the President has to make sure that we lead this charge and make it a national effort.

There's a lot of opportunity for the States to do their parallel lane as you put it perfectly, referencing the Interstate Commerce Clause. So thank you for your time. And with that, I yield back.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to the gentleman from Illinois. Mr. Foster, you're recognized for 5 minutes.

Mr. FOSTER. Thank you, Mr. Chairman, and Director Kratsios. Yes, I'm Bill Foster. I'm the sort of the pet Ph.D. physicist and chip designer and AI programmer and, you know, name it—accelerator, builder. And we keep one of them around for contingencies.

I'd like to speak a little bit about the agentic AI communication standards. And because, you know, as—to the extent that you still follow finance, you can see everyone is anticipating that agentic AI is just going to take over finance and commerce generally. That instead of dealing with people directly, you will deal with their AI agents. And it is crucial that we have standards for the communication: what it means to, you know, data privacy, data retention, data logging, you know, making legally binding contracts—all these sort of things.

Right now, there are—frankly, it's a mess in terms of the standards. There are at least six different competing standards at different levels of the technology stack for agentic communication. I think there's the Anthropic MCP. Google, I think, has two. IBM has one. The Lennox Foundation, W3C are also players. And so this is something where I think NIST really could play a positive role by standing up and convening everyone. They're not going to write them.

But this is something where if you want the U.S. to, you know, provide the technology stack—this is way above the chip level—but it's really important. Because if we don't get this right, we're going to have—we're going to have the sort of chaos that we had when we built the internet fast and loose without thinking about privacy and data and so on.

So, you know, I'd urge you to get NIST moving on that. And we have legislation to encourage that if that's useful. I imagine you could probably do it internally in the White House. So do you have any—

Mr. KRATSIOS. No. Thank you so much. It's funny you say that because that literally was something that our team was talking about just recently. If you're open to it, I'd love to follow up with your office and get your thoughts on it. I think it's a very important role that NIST can play.

Mr. FOSTER. Yes, and crucial to that is digital identity, because the whole world is using NIST developed standards for digital identity. You know, by the end of, I think, this year, every EU citizen is going to have the ability to prove they are who they say they are and not an AI deepfake impersonation by getting out their cellphone, using all of the standards that were developed in, you know, actually in NIST in the Obama Administration have been not implemented in the United States. But the rest of the world has adopted them.

Mr. KRATSIOS. Mm-hmm.

Mr. FOSTER. And so this will be—and that's sort of the first question: when my agent starts talking to your agent is who authorized you and who is the legally traceable human behind this. So there's a lot of work that was promised by the Biden Administration and never delivered to get a secure digital identity in the hands of

American citizens that wish to use one. So that's something where you could get a lot of, I think, bipartisan support.

We also—we're in a situation as a country we had hundreds of billions of dollars of Covid identity fraud that did not happen in countries where they had deployed a secure digital ID. We want your Federal benefit. You know, smile at your cellphone. Do your biometric login. Present, you know, your Real ID driver's license or the European equivalent.

And so that's something that will pay for itself many times over. And there's a lot of industry enthusiasm for that. You know, I—with my other hat on, I'm the lead Dem on the Banking Subcommittee on Financial Services, and so I know there's a lot of pent-up industry enthusiasm there.

OK. Chip security—first off, the H200 is not trivial. You know, can you just for the record—can the H200 be used to design nuclear weapons? Can it design—used to be—bioweapons or nerve agents? Can it be used for military logistics?

I think if you ask your experts they will tell you yes. You have access to the best bomb designers in the world, and you know, you can do better with a bigger one, but it is just fine for that. Is it OK with you if the Chinese and North Koreans get access to those chips and start doing exactly what I was talking about? How—what is your plan after we deliver them to keep them from doing that sort of stuff?

Mr. KRATSIOS. The Chinese already have access to chips that work on all the issues—

Mr. FOSTER. That they have stolen. Yes, that they have—well, they have some. They will—more is better. North Koreans will be using their stolen crypto to get access even to data centers in the West. Do you have a plan to prevent bad actors from using things like confidential compute to get—to anonymously access the data centers in the West?

Mr. KRATSIOS. So we have visibility into the end users who apply for the export license.

Mr. FOSTER. You're saying that everything you sell into Saudi Arabia or wherever that you will know every—you will know the workflow that—by every one of those end users—when they say it's drug development, but in fact it's bioweapons—that you're going to have march-in capacity to go in and say that's not drug development? You're developing nerve agents.

Mr. KRATSIOS. I think generally just zooming up a second I think that the types of activities that both of us agree we should not be supporting or endorsing by our competitors or adversaries are ones that other existing chips that they already have access to are being used for and can be used for.

Mr. FOSTER. So you're saying it's—all right. I yield. Out of time, yield back. And let's continue to speak on this.

Chairman OBERNOLTE. The gentleman yields back. We'll go next to the very patient gentleman from Alaska. Mr. Begich, you're recognized for 5 minutes.

Mr. BEGICH. Thank you, Mr. Chair. Mr. Kratsios, can you describe the physical AI supply chain at a high level: minerals, manufacturing, real estate, energy?

Mr. KRATSIOS. A very broad question. But broadly speaking, it covers a lot of what you said. It starts from critical minerals that lead into the larger semiconductor chain that go all the way up to the way that we build our datacenters to the models themselves that we use—that we train on top of those datacenters and then the applications that are built on top of those models.

Mr. BEGICH. What do you think are the most significant bottlenecks and limiting factors to the deployment of that physical AI capacity?

Mr. KRATSIOS. I think in the United States the growing bottleneck has been power. And that is why the President has been so focused and so determined to drive American leadership in energy and broadly energy abundance.

I think these new data centers that are going to be powering a lot of this AI revolution need increased energy. And that's why the President has been so incredibly focused on deregulating and expanding energy production, on increasing grid reliability and security, on implementing permitting reform, on sort of re-establishing our leadership in nuclear energy. These are all things we have to get right if we want to have enough power to drive the AI revolution.

Mr. BEGICH. Are you concerned about the critical minerals availability, the actions by China to restrict the availability of certain critical minerals, and the mining regulatory environment as it exists today in the United States?

Mr. KRATSIOS. I think generally we believe that we have to be able to reshore and have reliable access to these critical minerals. And there's been a tremendous amount of action by the Department of War and the Department of Commerce using DPA (Defense Production Act) authorities and others to make sure that we have the critical minerals that we need as a country to make sure that in a time of need we have the supplies that we need to power our grid technologies.

Mr. BEGICH. So while we're working on a lot of that regulatory reform codification here in Congress, given the bottlenecks and the regulatory barriers that you've identified, which global jurisdictions right now are best prepared for the deployment of physical AI capacity?

Mr. KRATSIOS. I think for us, we're still broadly evaluating where we want to focus our American AI export program. I think there's—I think—when we think about exporting American AI, I think sometimes there's a bit of confusion in the sense that the easy answer may be, oh, who has the most cheap power availability. That's where we need to go.

The reality is that the number of global players around the world that have the money and the desire to be training very expensive, large-scale frontier models is quite small. The actual reality is that most countries around the world simply need sufficient inference capacity in order to run basic AI queries for the workloads that they want for their people—whether it be for their hospitals, for their governments, for their consumer applications.

So as we think about our AI export program, we're trying to create ultimately packages which are small enough and economical enough to support the needs of individual countries. And I think

sometimes we kind of get caught up in this idea of who wants to build a training cluster, and the reality is its us, China, and maybe a couple others.

Mr. BEGICH. Now, I'm going to shift gears here and talk about a topic that was raised here just a moment ago; reframe it as proof of personhood, right. So this has been an ongoing question, and it's an increasingly relevant one as we see AI get more sophisticated in its presentation of video, audio persuasiveness.

You know, when we talk about the dawn of the internet, right, and what we've seen since the World Wide Web really took hold, that was really a communications and data layer. And it was necessary in order for us to achieve what we're now achieving with AI. AI is sort of a cognitive layer, right. And it's threatening—and I think the people have a rational basis for concern with their purpose being displaced.

Is this something that we—that you talk about? Is it a theme within your teams about whether we are ultimately replacing the purpose of work as we know it? What are your thoughts just generally?

Mr. KRATSIOS. My general view is technology is actually empowering for American worker. It allows them to do their job better, safer, faster, more effectively. And it requires them—it allows them to work on higher order, higher thinking tasks and ultimately make their contributions something that's more personally rewarding.

Obviously, as this technology advances and changes, there's a lot to consider. And Mr. Foster talked about sort of the agentic future that we're going to be having. That's obviously going to impact the way that people work. But that's something that's top of mind of us, and it's very much built into the way we think about the workforce programs.

Mr. BEGICH. Thank you. Appreciate your insights. And with that, I yield back.

Chairman OBERNOLTE. The gentleman yields back. And we'll hear next but—last but not certainly not least from the gentleman from Virginia. Mr. Beyer, you're recognized for 5 minutes.

Mr. BEYER. Mr. Chairman, thank you very much. So thanks for holding this hearing. Mr. Kratsios, it's wonderful. I've been hearing about you for a year. I feel like the presence of a renaissance man with a Princeton degree in politics and a certificate of Hellenic studies and end up OSTP chief. So thanks much for being here.

I noticed my colleague, George Whitesides, brought up the existential risk of artificial superintelligence before. So I won't dive deep into that, although I do want to point out that what's theoretical today could be real tomorrow. Craig Mundie, whom I'm sure you know, who is head of research at Microsoft talked about how when we create machines that learn, we don't—then we get out of the way as long as you're building it and it can learn. Whereas others have written, artificial superintelligence is grown, not crafted.

When even our very best computer scientist don't exactly know how the neural networks are working, we don't know where it's ultimately going to go. And when some of the very best computer science theorists in the world are worried, we should be anxious too.

But let me move to a different thing. You know, we have this absence of meaningful AI legislation. I'm sitting next to the wonderful chair of AI Task Force, Chairman Obernolte and Vice Chair Ted Lieu, did a terrific job last year putting together literally 270 pages, which I'm sure you've read, but 80 fully bipartisan pieces of legislation. So far one has passed: the *TAKE IT DOWN Act*.

We're in this vast wasteland of nothing happening. I know you've already been a leader on this. Your Wikipedia page says, quote, you're "responsible for developing a set of regulatory principles to govern AI development in the private sector." Otherwise, you've "led U.S. efforts at the OECD (Organization for Economic Cooperation and Development) to develop the OECD recommendations for AI." Mr. Kratsios, I'd love to be able to work with you on actually getting a Federal AI framework.

Mr. KRATSIOS. I—

Mr. BEYER. And that's a plea and an offer.

Mr. KRATSIOS. Well, I would love that. I've been charged by the President in Executive order to do just that. And I look forward to working with you and other Members of this Committee on a sensible national policy framework.

Mr. BEYER. Great. Great. Thank you very much. And we were pleased that the President's Executive order continued to support the NIST efforts and the Safety Center—CAISI.

So but in December, the President signed an Executive order that threatened States with lawsuits and the denial of billions of dollars of broadband supports if they adopted AI laws that were burdensome or onerous. And this was after Congress considered whether to impose a moratorium on State AI legislation last July.

I know Chairman Obernolte and I disagree on this, but the Senate rejected it on a 99 to 1 vote. So several questions. I want to ask the rhetorical question about whether you agree with Governor DeSantis on this who thinks that the President lacks the power. But the Executive order specifically tasks you and your office with helping to decide what law counts as onerous. So what part of the Constitution says that the director at OSTP has the power to overrule laws enacted by State legislatures?

Mr. KRATSIOS. So the—as a director, I am not actually responsible for that. The Secretary of Commerce is in consultation with me. So I look forward to hearing from the Secretary as he works through that collection of those laws.

Mr. BEYER. And when you're advising which laws count as onerous, will you have any say in what the criteria is used for that?

Mr. KRATSIOS. I think that's a process to be determined. But as the Executive order stated, it sits at Commerce.

Mr. BEYER. Yes, let me just point out a couple of examples. Colorado is trying to stop AI from discriminating in hiring. California wants transparency on AI models. New York requires disclosure when someone is talking to a chatbot. Florida is prohibiting nudity apps that produce sexualized images of mirrors.

Chairman Obernolte and I have served in our respective State legislatures. I think we both believe that State legislatures are the laboratories of democracy. I agree with the Chairman that when we have a meaningful framework at the national level, then we don't want a Tower of Babel. We don't want chaos at the State levels.

But while it's 1 for 80, I think it's really inappropriate to hamstring the States who may be teaching us the best way to have meaningful legislation. And in my 38 seconds, I'd welcome any thoughts you have.

Mr. KRATSIOS. No, I think at the end of the Executive order, the President makes clear that, you know, we should be working with Congress on a legislation proposal on this particular issue. And he also specifically calls out that we should not preempt otherwise lawful State laws that relate to certain topics, including child safety, AI compute and data infrastructure, and also the State government procurement of AI. So there are certainly things that are specifically called out in the EO. And as we work through this legislative process, I think they'll be more we can work on together.

Mr. BEYER. Great. Great. Thank you very much. And I yield back.

Mr. KRATSIOS. Thank you.

Chairman OBERNOLTE. The gentleman yields back. That concludes our round of questioning. I would like to thank you, Director Kratsios, for your valuable testimony today and thank all of our Members for their thoughtful questions. This has been a really valuable hearing, and we'll have to continue this conversation.

The record will remain open for 10 days for additional comments and written questions from Members.

With that, this hearing is adjourned.

[Whereupon, at 12:25 p.m., the Committee was adjourned.]

Appendix I

ANSWERS TO POST-HEARING QUESTIONS

ANSWERS TO POST-HEARING QUESTIONS

Responses by Hon. Michael Kratsios

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Representative Chuck Fleischmann, Committee on Science, Space, and Technology

1. Oak Ridge National Lab in my district is a critical facility for nuclear research. It's good to see the Department of Energy's work through the Genesis Mission to increase AI infrastructure for science, including nuclear research. How can we use AI to accelerate the timelines of commercial nuclear power plants?

Oak Ridge National Laboratory is a key national asset that possesses world-class capabilities across nuclear technologies, high-performance computing, and many more core competencies. With regard to accelerating commercial nuclear timelines, AI can be leveraged to support generating systems documentation, creating new reactor designs with optimized characteristics, and identifying novel materials for testing and qualification.

2. In addition to Oak Ridge's leadership in high-performance computing and artificial intelligence, the laboratory is also a major center for quantum computing research. We are beginning to see how high-performance classical computing and quantum systems can be used together to address important national science challenges, including generating data that can help train AI models to better understand the natural world. Can you discuss how you see the role of the national laboratories in deploying and integrating classical-quantum computing systems, and what that means for the future of AI-enabled scientific discovery?

The Department of Energy, through its network of National Laboratories and user facilities, has a history of deploying first-of-a-kind supercomputers for scientific applications and national security. The DOE is well-positioned to continue this trajectory and explore the convergence of classical high-performance computing, AI, and quantum computing, particularly through initiatives such as the Genesis Mission. The integration of these systems could enable the outputs of quantum information systems to be incorporated directly into the AI workflow, enabling AI models to be trained on new forms of information derived from quantum systems and for AI to improve the quantum information systems. This feedback loop is expected to create a powerful new paradigm for scientific discovery. While we are already seeing intrepid researchers exploring the application of AI to quantum and vice versa, it will require an entity like the National Labs to bring all the relevant expertise together at the scale necessary to enable this synergistic evolution of technology.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Representative Daniel Webster, Committee on Science, Space,
and Technology

1. By promoting voluntary consensus standards developed through a private-sector-led process, would this approach serve as the basis for a sound national economy and provide a key to global market access?

As outlined in the AI Action Plan, voluntary standards led by the private sector are a critical mechanism for accelerating AI adoption, reinforcing America's global leadership, and expanding access to international markets. The Administration recognizes the essential role that standards and non-regulatory policy frameworks play in its efforts to build public trust and enable continued innovation.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Chairman Jay Obernolte, Committee on Science, Space, and Technology

1. The AI Action Plan recommends laying the foundation for a lean and sustainable National AI Research Resource (NAIRR) and directs OSTP, NIST, and the NAIRR pilot to help create a compute market where researchers can buy compute the way businesses purchase electricity or other commodities – in the quantities they need, at the time they need it. As the author and sponsor of the House legislation to codify the NAIRR, H.R. 2385, the CREATE AI Act, I'm curious as to what you see as the vision for a sustainable NAIRR, and also what concrete steps is OSTP taking to develop these compute markets?

OSTP is actively working with departments and agencies, as well as industry and academic institutions, to ensure the American AI research community has the necessary access to compute, high-quality scientific datasets, leading U.S. AI models, and educational tools. NSF has recently closed the solicitation for the NAIRR Operations Center to support NAIRR's transition beyond the pilot phase.

2. What actionable steps are you and OSTP taking to create minimum data standards, in line with both the AI Action Plan and the NSCEB's report?

The Genesis Mission affords the opportunity for collaboration across agencies to establish minimum data standard. These standards and datasets will support the objective of building the world's most powerful AI-enabled scientific platform by combining large, Federal datasets with leading American AI models and compute to accelerate discovery science, strengthen national security, and drive energy innovation. The White House FY27 Administration Research and Development Budget Priorities memorandum directs funding to be prioritized for AI, including government-wide curation of scientific data.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

3. Mr. Kratsios, do you believe that the AI-enabled scientific platform developed by the Genesis Mission could be leveraged to advance U.S. biotechnology contract manufacturing, and therefore America's biotechnology ecosystem? Could the AI platform be used to advance biomanufacturing techniques, scale-up processes, plant design, or even other aspects of biotechnology contract manufacturing? What do you believe Congress and the Administration should be doing so that AI tools, infrastructure, and AI-ready biological data are able to bolster America's biotechnology ecosystem writ large?

The Genesis Mission will play a pivotal role in driving breakthroughs across biotechnology and biomanufacturing by enabling AI-accelerated discovery, predictive modeling of biological systems, and autonomous experimentation at unprecedented speed and scale. Continued prioritization of these efforts to coordinate federal infrastructure of biological data will strengthen U.S. leadership in this critical field, and support our long-term economic prosperity and national security.

4. What is the best way for these small, early-stage companies to work with the AI-biorisk research community so that companies can be sure to innovate responsibly while not slowing the pace of their work?

The AI Action Plan calls for modernized, multi-tiered approaches that support both innovation and biosecurity. Biotechnology, among many other beneficial uses, saves American lives and improves human health given it enables the invention and production of medicines, therapeutics, and treatments such as drugs to treat diabetes and cancer. Artificial intelligence and machine learning have been enabling biotechnology for decades, and generative AI continues this trend, furthering the capabilities of the biotechnology ecosystem.

5. How can we ensure that we maximize the benefits of AI/ML-powered biotechnology, do not slow innovation, and get life-saving treatments to patients in need as rapidly as possible, while at the same time minimizing AI-biorisks such as intentional misuse or an accident?

AI will unlock nearly limitless potential in biology: cures for new diseases, novel industrial use cases, and more. The AI Action Plan calls for modernized, multi-tiered approaches that support both innovation and biosecurity, using AI tools and infrastructure to screen for malicious actors.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Ranking Member Zoe Lofgren, Committee on Science, Space,
and Technology

1. In 2022 the Biden-Harris Administration released a memorandum entitled “Ensuring Free, Immediate, and Equitable Access to Federally Funded Research,” which ensured that the public has free and immediate access to federally funded research and data. In the recent Fiscal Year 2026 Appropriation Agreement’s Explanatory Statement, appropriators claimed that OSTP may be in the process of repealing this memo and thus will limit the public from accessing the benefits of taxpayer-funded research. I am alarmed by this possibility because keeping data behind a firewall undermines our shared goal of accelerating AI-enabled science. Are you planning to repeal this memo?

As OSTP continues to review this memorandum, we welcome your feedback and insights.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Representative April McClain Delaney, Committee on Science, Space, and Technology

Importance of Stakeholder Partnership in Education

1. The AI Education Task Force has convened valuable roundtable discussions with federal agencies and select stakeholders, as noted in recent announcements. How will you build on this initial engagement to ensure sustained coordination—not only across federal agencies, industry, and academia, but also with state education agencies, local school districts, and STEM networks and ecosystems that play a critical role in implementation?

The White House's AI Education Task Force provides an important vehicle for sustained and impactful federal interagency coordination. But truly advancing AI education for American youth requires ongoing partnerships across federal agencies, state and local governments, STEM networks, private sector innovators, and more. OSTP is supporting this in two key ways:

The Presidential AI Challenge, launched in 2025, has proven to be an excellent engagement opportunity for getting the K-12 community involved in AI education. Over 20,000 students, educators, and mentors from all 50 states registered. State and regional competitions will culminate in national champions visiting Washington, DC this summer.

The White House also established the Pledge to America's Youth, which has secured over \$1 billion in commitments from 200 non-profit and industry partners, making cutting-edge AI education resources and trainings freely available for K-12 teachers and parents nationwide.

2. What specific actions or timelines can you share for moving from dialogue to actionable strategies that align with the National AI Action Plan and empower states and localities to shape AI education and workforce development?

Working with OSTP, the Department of Education has established an AI supplemental priority for discretionary federal funding in education. This action prioritizes proposals that integrate AI literacy into teaching to boost student outcomes; expand AI and computer science education across K-12 and higher education; provide educator professional development in AI fundamentals; leverage AI for personalized, differentiated learning; and deploy AI to streamline classroom operations, reduce administrative burdens, and enhance teacher training and evaluation.

The Presidential AI Challenge has engaged over 20,000 K-12 students, educators, and mentors nationwide. In the coming months, states and localities will showcase students' and teachers' innovative AI projects in classrooms and communities, sparking greater interest in AI careers and advanced education in this critical field.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Looking forward, effective coordination of education and workforce programs is essential to execute the AI Action Plan and usher in the Golden Age of American Innovation for the next generation.

Nucleic Acid Synthesis Screening

3. Nucleic acid synthesis has a countless number of applications across all sectors leading to innovations that improve health, drive economic opportunity, and promote responsible stewardship of our natural resources. At the same time, synthetic nucleic acids are a dual-use technology and, without robust screening of customers and orders, could be misused - risks that will only increase as AI-enabled protein design capabilities advance. For years, the federal government across recent administrations has worked with industry to promote strong screening standards, culminating in OSTP's 2024 Framework for Nucleic Acid Synthesis Screening, which tied federal life sciences funding to the use of compliant providers. This Administration has reaffirmed the importance of screening in its AI Action Plan. In an Executive Order issued on May 5th, the Administration directed OSTP to revise the 2024 Framework within 90 days, however, to date, no updated framework has been released. What is the status of the revised screening framework, and when will it be made available to nucleic acid synthesis providers and other manufacturers?

AI will unlock nearly limitless potential in biology: cures for new diseases, novel industrial use cases, and more. At the same time, it could create new pathways for malicious actors to synthesize harmful pathogens and other biomolecules. The solution to this problem is a multitiered approach designed to screen for malicious actors, along with new tools and infrastructure for more effective screening. As these tools, policies, and enforcement mechanisms mature, it will be essential to work with allies and partners to ensure international adoption. OSTP continues to collaborate across the federal interagency to implement the Executive Order.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Representative Valerie Foushee, Committee on Science, Space,
and Technology

Mr. Kratsios, Section 4 of President Trump's recent Executive Order (EO), "Ensuring a National Policy Framework for Artificial Intelligence," calls on the Secretary of Commerce to consult with you, the Assistant to the President for Science and Technology, to identify laws that require AI models to "alter their truthful outputs." This is concerning to me because I do not believe it is the job of a partisan Administration to define what truthful output is in relation to the preemption of State law and the reallocation of billions of taxpayer dollars. I am concerned with the lack of transparency. A handful of partisan officials using undisclosed practices to evaluate state laws regarding "truthful output" cannot be trusted to respect the right to free speech. No Administration may act as the Ministry of Truth.

Regarding this topic, I asked you, "What is truthful output and what is the administration's legal basis for determining the truth?" You responded by stating, "that interpretation I think was made by the Office of Management and Budget (OMB) when they attempted to create the guidance relating to implementing that. So I refer you to that memo." However, I have not seen any public memos from OMB that define truthful output.

1. Can you identify the specific memo you were referring to in your answer?

OMB Memorandum, M-26-04, "Increasing Public Trust in Artificial Intelligence Through Unbiased AI Principles."

2. Have you consulted with Secretary Lutnick about the implementation of this Executive Order in relation to any specific state laws? If so, can you identify which laws?

No.

**U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
Subcommittee on Research and Technology
Advancing America's AI Action Plan**

Hon. Michael Kratsios, Director, White House Office of Science and Technology Policy

Questions submitted by Representative Don Beyer, Committee on Science, Space, and Technology

1. Given that many of the founders and leaders of the AI industry have characterized superintelligence as a serious public risk, what is the Administration's formal assessment of the likelihood that advanced AI systems will escape human control and cause catastrophic damage, and on what timeline does the Administration expect such capabilities to emerge?

Prudent AI policymaking should be grounded in empirical evidence. OSTP regularly consults with experts across government, industry, and academia to receive a broad range of views on AI progress, and receives information from our national security community on an ongoing basis. These ongoing consultations inform our policy development as capabilities evolve.

2. The 9/11 Commission identified a 'failure of imagination': not a failure to predict the exact attack, but a failure to prepare for contingencies within a known threat category. What evaluation framework will the Administration use to assess whether AI risks move from hypothetical to demonstrable, what indicators would trigger a policy response, and what contingency plans are the Office of Science and Technology Policy developing to ensure preparedness if such risks materialize?

As outlined in the AI Action Plan, OSTP is coordinating interagency action to build a robust, private sector-led AI evaluations ecosystem. This includes advancing measurement science, convening government and research community stakeholders, and investing in AI test beds at DOE and NSF. The Administration is also ensuring critical infrastructure cybersecurity and promoting mature response capabilities at relevant agencies including DOW, DHS, DOJ, and ODNI.

3. If OSTP does not assess the loss of control over artificial superintelligence systems as a credible threat, what is the specific technical evidence underpinning such an assessment? What developments would need to occur for the Administration to conclude that advanced AI capabilities merit proactive planning?

Prudent AI policymaking should be grounded in empirical evidence. OSTP regularly consults with experts across government, industry, and academia to receive a broad range of views on AI progress, and receives information from our national security community on an ongoing basis. These ongoing consultations inform our policy development as capabilities evolve.

Appendix II

ADDITIONAL MATERIAL FOR THE RECORD

DOCUMENTS SUBMITTED BY REPRESENTATIVE JAY OBERNOLTE



Biotechnology Innovation Organization
1201 New York Ave., NW
Suite 1300
Washington, DC 20005
202-962-9200

December 26, 2025

Stacy Murphy, Deputy Chief Operations Officer/Security Officer
Office of Science and Technology Policy
725 17th St, NW
Washington, DC 20500

For electronic submission

Re: BIO Comments on ID OSTP-TECH-2025-0100

Dear Ms. Murphy:

The Biotechnology Innovation Organization (BIO) appreciates the opportunity to provide comments on the Office of Science and Technology Policy (OSTP) Request for Information on federal policies that can accelerate the American scientific enterprise. BIO appreciates this RFI as it demonstrates the Administration's focus on ensuring that the United States maintains its leadership in biomedical innovation, which contributes to our nation's health, economic and national security. Through our comments BIO emphasizes that a stable and predictable policy environment is essential to sustaining public-private collaboration and long-term investment in biomedical innovation. Drug discovery and development require extended time horizons and significant capital commitments, and uncertainty in federal research priorities or funding disrupts effective partnership planning and execution.

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers, and related organizations across the United States and in more than 35 other nations. BIO membership includes vaccine developers and manufacturers who have worked closely with the public health community to support policies that help ensure access to innovation and life-saving vaccines for all individuals.

Below please BIO's responses to a selection of the proposed questions.

(i) What policy changes to Federal funding mechanisms, procurement processes, or partnership authorities would enable stronger public-private collaboration and allow America to tap into its vast private sector to better drive use-inspired basic and early stage applied research?

Modernize federal funding mechanisms to align with biomedical innovation

To fully leverage America's private-sector innovation capacity, federal funding mechanisms must better reflect the realities of biomedical research and development.

First, federal investments should place greater emphasis on use-inspired basic and translational research, particularly in areas where scientific risk remains high but public health impact is significant. Sustained, multi-year funding that supports early target validation, platform technologies, and enabling science would provide a stronger foundation for downstream private investment.

Second, funding structures must be more flexible and milestone-driven, allowing resources to support early proof-of-concept work, IND-enabling studies, and scalable manufacturing approaches. Programs that permit industry partners to contribute expertise, infrastructure, and capital alongside federal funds—without unnecessary restrictions—will accelerate translation and improve outcomes.

Finally, federal funding should be designed to de-risk early-stage innovation and crowd in private capital. Expanded and predictable R&D tax incentives, combined with co-investment and blended-finance models, would strengthen incentives for companies to engage in collaborative research with federal laboratories and academic institutions.

Taken together, these changes would modernize federal funding mechanisms, reduce early-stage risk, and enable more effective public-private collaboration to advance high-impact biomedical innovation.

Establish a predictable, long-term policy environment to support public-private collaboration

Federal agencies should commit to multi-year funding frameworks that provide continuity across fiscal years and administrations, particularly for programs supporting use-inspired basic and early-stage applied research. Clear articulation of national research priorities—aligned with public health needs, biosecurity, and U.S. competitiveness—would further enable industry, academic, and government partners to coordinate investments and capabilities more effectively.

In addition, consistent and transparent policy signals regarding partnership authorities, intellectual property protections, and regulatory expectations are critical to reducing perceived risk and encouraging private-sector engagement. Harmonizing approaches across agencies and maintaining durable partnership models would strengthen trust, improve efficiency, and support sustained collaboration.

A predictable and coherent policy environment would enable the biopharmaceutical industry to plan and invest with confidence, reinforce the effectiveness of public-private partnerships, and help ensure that federal research investments translate into meaningful advances for patients and public health.

Further operationalize the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) to strengthen the MCM Enterprise

The United States has built powerful but fragmented authorities for medical countermeasure (MCM) research, development, and procurement across the Administration for Strategic Preparedness and Response (ASPR), the Biomedical Advanced Research and Development Authority (BARDA), Strategic National Stockpile (SNS), Department of War (DoW), National Institutes of Health (NIH), and the U.S. Food and Drug Administration (FDA). Project BioShield and BARDA's advanced research and development programs exemplify that long-term, public investment and predictable markets can incentivize companies to continue to participate in high-risk, low-commercial-return MCM areas. Strengthening the nation's MCM enterprise directly advances the Administration's goals of making America safer, more secure, and more prosperous by ensuring that the United States can rapidly detect, prevent, and respond to chemical, biological radiological and nuclear (CBRN) threats. When MCM development, procurement, and interagency activities are aligned, it enables the government to leverage private-sector innovation more effectively and sustain the readiness needed to protect the American people.

In the context of MCM development, the "valley of death" refers to the critical transition period between preclinical evaluation of a candidate and the initiation of more costly Phase-2 clinical trials. During this phase, technologies must be sufficiently derisked to justify larger scale investment. This challenge is particularly acute for MCMS, where commercial markets are often limited, or uncertain and private capital alone is frequently insufficient to support progression through early development.

Bridging this transition requires not only targeted and sustained funding of ASPR's programs, but also coordination across agencies responsible for MCM research, advanced development, procurement, and deployment to ensure continuity, clarity of requirements, and alignment around potential downstream pathways.

The PHEMCE was designed to address this challenge by coordinating Federal roles across research, development, procurement, and deployment. Building on this existing framework, further operationalizing PHEMCE could help ensure that early stage, use inspired research is better connected to later stage development and acquisition decisions.

To systematically engage the broader private sector for MCM development and procurement, BIO recommends several policy changes:

- Using PHEMCE processes to improve alignment across NIH, BARDA, DoW, and ASPR by connecting early MCM research investments to clearly articulated development objectives, transition criteria, and potential procurement considerations, consistent with each agency's mission and authorities. This approach reflects the direction set forth in section 2811–1 of the Public Health Service Act (42 U.S.C. § 300hh–10a), which establishes PHEMCE to coordinate Federal medical countermeasure research, development, procurement, and deployment, and would be strengthened by the leadership and coordination of a dedicated White House official to provide continuity, visibility, and convening leadership for the enterprise, consistent with statutory intent and prior practice.
- Engaging industry through targeted, recurring PHEMCE-convened meetings focused on priority MCM areas, to improve mutual understanding of development timelines, readiness benchmarks, and transition challenges, and to help ensure that Federal research, development, and procurement activities are informed by real-world scientific and manufacturing considerations.

By strengthening continuity across the MCM lifecycle, PHEMCE can help reduce the risk that promising MCM candidates stall at key transition points, enabling the Federal government to leverage private sector innovation more effectively to sustain readiness and protect national security.

Reinforce predictable demand signals to sustain private sector engagement and readiness

In areas where commercial markets are limited or uncertain, predictable government demand signals play a critical role in sustaining private-sector engagement and preserving capabilities essential to national security. Existing Federal programs, including Project BioShield and BARDA, demonstrate the value of stable funding and procurement commitments in enabling industry participation in high-priority MCM areas that would otherwise struggle to attract sustained private investment.

Predictability across funding and acquisition timelines allows companies to make long-term investments in MCM research and development, reducing risk during early development and supporting continuity across the innovation lifecycle. These dynamics are particularly important where the marketplace for MCMs is driven primarily by Federal procurement through BioShield or the Strategic National Stockpile.

To build on these models, BIO recommends the following changes:

- Expanding the use of the PHEMCE Multi-Year Budget (MYB) and procurement authorities, including mechanisms that allow for greater flexibility across fiscal years, to provide continuity and reduce disruption across research, development, and acquisition phases.
- Utilizing a range of market-shaping tools, such as advance market commitments, volume guarantees, and warm-base manufacturing agreements, to sustain readiness, preserve manufacturing capability, and enable rapid scale-up and surge capacity when needed.
- Pairing procurement strategies with lifecycle management and replenishment planning, ensuring that investments support the long-term effectiveness and readiness of the Strategic National Stockpile rather than one-time acquisitions.

Together these considerations would reinforce alignment across research, development, and procurement; support sustained private-sector engagement; and strengthen the nation's ability to advance MCM research and development in support of biodefense and broader national security objectives.

(ii) How can the Federal government better support the translation of scientific discoveries from academia, national laboratories, and other research institutions into practical applications? Specifically, what changes to technology transfer policies, translational programs, or commercial incentives would accelerate the path from laboratory to market?

BIO and our biotechnology company, academic institution, state biotechnology center, and related organization members assess that there are currently three key opportunities for the Federal government to better support the translation of scientific discoveries from academia, national laboratories, and other research institutions into practical applications: (1) Empowering U.S. contract manufacturing; (2) Modernizing intellectual property (IP) management and streamlining administrative processes for federal research; and (3) Enhancing FDA as Global Gold Standard.

Empower U.S. contract manufacturing

First, to enable mechanisms like effective technology transfer policies, translational programs, and commercial incentives to accelerate the path from laboratory to market in biotechnology with maximal impact, federal oversight and coordination must be established.

- Create a formal mechanism in the Federal government for oversight and to coordinate these efforts across HHS, DoD, Commerce, and others (e.g., an interagency task force or a National Biomanufacturing Strategy Office). Without central leadership, implementation of these recommendations risks duplication or gaps. A national strategy could provide policy directives and position biotechnology manufacturing as critical infrastructure. A dedicated coordinating body ensures accountability and maximizes the return on federal investment. This coordinating body could also provide benchmarking against global competitors.

Transferring technology to the U.S. should be incentivized, specifically for biotechnology.

- Provide incentives for biotech companies to choose U.S. contract manufacturers or move existing contract pipelines to the U.S. Incentives could include targeted tax credits for the incremental costs of transferring technology from one facility to another, access to other forms of capital, patent term.

extensions, additional exclusivity, federal procurement commitments, etc. Technology transfers between facilities, including from international facilities to the U.S., require significant spend, such as on production batches, equipment upgrades, labor, validation, and regulatory documentation. Incentives reduce barriers to commercialization, encourage U.S. domestic scaling, and derisk capital commitment from investors.

Translational programs for biotechnology that leverage government guarantees to attract private investment and reward technology adoption and innovative facilities should be launched.

- Expand government-backed grant and credit tool programs tailored to biotechnology manufacturing projects. These could include structures like credit guarantees, flexible/convertible loan instruments, specialized mechanisms (e.g. DFC/DPA), etc. Biomanufacturing requires significant upfront investment. Federal guarantees reduce capital costs, attract private investment, and accelerate growth in this strategic sector.
- Provide funding and tax incentives for adoption of advanced technologies (e.g. continuous processing, AI-driven quality systems) and support direct funding for pilot-scale (i.e. low production volume) facilities in emerging modalities such as cell and gene therapy or mRNA. Cutting-edge technologies and early-scale capacity are essential for efficient production and rapid translation of scientific breakthroughs. Public support builds resilience and positions the U.S. as a global leader.

A series of commercial incentives would supercharge the biotechnology ecosystem.

- Incentivize Servicing Low-Volume Contracts. Apply preferential tax rates for contract manufacturers serving low-volume contracts or orphan sponsors. Implement accelerated depreciation for qualifying capital expenditures and expand interest deductibility for biotech infrastructure investments. These policies reduce cost barriers, improve cash flow, and make it financially attractive to prioritize smaller U.S. innovators while expanding domestic capacity.
- Lower Barriers to Making Capital-Intensive Investments. Offer financial incentives, such as tax credits, targeted grants, or partial loan forgiveness for capital-intensive investment. These could include greenfield facility builds, buildouts of existing sites, purchasing of specialized equipment and upstream materials, etc. Greenfield builds, site expansions, and capital investments carry high upfront risk but deliver resilient, future-ready facilities. Incentives de-risk private investment and anchor long-term capacity in the U.S.
- Encourage Integrated End-to-End Facilities. Explicitly reward fully integrated contract manufacturing campuses that bring end-to-end capabilities (from the creation of drug substance through to final drug product) under one roof. Incentives may include preferential tax treatment and grants. End-to-end integration reduces friction, eliminates the need for tech transfer across multiple contract manufacturers, lowers regulatory burden, and strengthens supply chain security. End-to-end models speed time-to-market and increase U.S. competitiveness.
- Ensure Manufacturing Equipment and Raw Materials are Available. Establish funding mechanisms and tax credits for upstream suppliers of critical biotechnology equipment and materials, including raw inputs, prioritizing domestic production. Reliable access to specialized equipment and inputs is essential. Domestic support reduces reliance on international vendors, secures U.S. supply chains, and ensures timely access to essential equipment.
- Prioritize Long-Lead Equipment and Materials. Create a National Strategic Biomanufacturing Priority List for long-lead equipment and critical materials, with incentives for domestic sourcing and priority procurement under federal oversight. Key equipment often has 18–24 month lead times. Federal prioritization shortens timelines and strengthens long-term security.
- Encourage Public-Private Manufacturing Clusters. Promote development of regional contract manufacturer-anchored biotechnology manufacturing clusters through incentives for shared infrastructure, workforce, and collaborative innovation. Clusters lower capital burdens, foster collaboration, and strengthen regional economies through localized supplier networks and talent pools. They accelerate product development by providing shared access to advanced facilities, expertise, and supply chains.
- Facilitate Access to Land and Infrastructure. Work with state and local governments to offer land grants, infrastructure support, and site development incentives in underutilized industrial or economic development zones. Subsidizing land and infrastructure attracts biotech investment, creates jobs, and revitalizes regions while aligning with national innovation goals.

Lastly, to fully unleash the U.S. as an engine for biotechnology, major utilities and logistics barriers must be addressed, and environmental review must be streamlined.

- Advance policies to improve utilities and transportation networks critical to biotech manufacturing operations. Stable utilities and efficient logistics are essential. Coordinated State, Local, and Federal

investment reduces risk and increases competitiveness of U.S. biotech hubs. Examples of utilities include power grid reliability, water and sewage systems, etc.

- Work with state and local governments to simplify and expedite environmental review processes for biotechnology facility construction, while maintaining safety standards. Long review timelines delay build-out and deter investment. Streamlining accelerates expansion and enhances public health readiness.

Modernize intellectual property (IP) management and streamlining administrative processes

- Modernization of IP and licensing management would stimulate more investment:
 - Simplify Licensing Agreements: Create standardized, plain-language, non-exclusive license templates for early-stage technologies to speed up initial adoption by small businesses and startups. This reduces the time and cost associated with complex legal negotiations.
 - Increase Flexibility in the Bayh-Dole Act: While the Bayh-Dole Act has been critical, the Federal government could provide more clarity and flexibility, particularly for inter-institutional collaborations and for research involving federally-funded databases or software, ensuring its application doesn't create unintended barriers to open access or commercialization.
 - Shift from "Patent and License" to "Business Building": Encourage Technology Transfer Offices (TTOs) at universities and national labs to focus less on passive IP management (licensing revenue, patent numbers) and more on active startup incubation, including mentorship, access to early-stage funding, and facilitating the formation of viable commercial entities.
 - Withdraw Biden administration Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights.
 - Withdraw or modify NIH licensing guidance "NIH Intramural Research Program Access Planning Policy."
 - Consider creation of tax incentives for inventions that are made and commercially developed in the United States, in order to encourage domestic R&D investment and to incentivize businesses to locate or repatriate their IP to the United States (patent box-type ideas).
 - Assess if U.S. patent law currently affords sufficient protection for technologies such as diagnostic tests, personalized medicine, AI-enabled processes, computer- or network-implemented inventions, and related cutting-edge technologies. Consider [reforms to the scope of patent-eligible subject matter](#) (35 USC 101) to ensure that US patent law is commensurate with the patent laws of our major trading partners with respect to the patentability and transferability of such technologies.
- Streamlining administrative processes will speed research partnerships:
 - Faster Review and Approval: Mandate accelerated timelines for reviewing and executing key agreements like Cooperative Research and Development Agreements (CRADAs) and Material Transfer Agreements (MTAs), which are essential for research collaboration between federal labs/academia and industry partners.
- AI Transformation: Invest in digital platforms and centralized communication hubs to manage the tech transfer process, making it faster, more transparent, and easier for external partners to identify and access federal technologies.

Strengthening FDA as the global gold standard

The cost and complexity of early drug development must be reduced by taking a number of steps.

- Support opportunities to reduce the administrative burden associated with the conduct of clinical trials by standardizing documents and processes. This may include uniform clinical trial contracts, streamlined Form 1572 reporting requirements, and standardized informed consent. Processes associated with opening sites and conducting clinical programs are inefficient and costly.
- Explore expansion of single IRB policies both within the FDA and across HHS and leverage new technologies for centralizing document collection and coordination. Use of local IRBs can take much longer than central or single IRBs slowing down the opening of new study sites.
- Outline expectations in guidance and support collaborative efforts to reduce animal testing with the goal of enabling New Approach Methods (NAMs). NAMs have the potential to more accurately model human biology and substitute for traditional animal models while accelerating the initiation of clinical trials.
- Clarify toxicology data requirements minimally necessary to initiate clinical testing and expand the use of risk-based approaches that can be scaled based on modality, mechanism of action, and clinical risk profile. A full IND-enabling toxicology data package can take 6 to 9 months to collect, and a risk-based approach may shorten this timeline while still ensuring patient safety.

- Support efforts to fulfill PDUFA meeting management goals and continue to evolve meetings best practices. Explore the potential for existing meeting types to be used more effectively to resolve urgent drug development questions. Drug sponsors need reliable and efficient mechanisms to engage with the FDA to reduce regulatory uncertainty and advance innovation.
- Support the application of Quality Risk Management to CMC to accelerate the start of INDs and ultimately product approval. Streamlining CMC data requirements may help address the US lag in first in human clinical trials.

FDA regulatory review must be strengthened so that it is more predictable and efficient to ensure the U.S. system for clinical development remains a distinctive and global competitive edge.

- Ensure predictability and consistency in regulatory reviews by conducting them according to the PDUFA "Enhanced Review Program". Key components of the application review process are occurring late in the review cycle contributing to last-minute decision making and growing numbers of CRLs.
- Streamline the manufacturing inspection process by expanding the use of Remote Interactive Evaluations, the use of Drug Master Files, and reliance on inspections by other health authorities. Facility inspections create a significant bottleneck that hinders timely product launch and discourages domestic investment.
- Evolve PDUFA regulatory science pilot programs into common practice (e.g., Complex Innovative Designs, Real World Evidence, Model Informed Drug Development) by updating guidance, training reviewers, and increasing transparency about the use of more efficient methodologies. Innovative clinical trial designs can reduce patient burden and increase overall trial efficiency.
- Partner with external stakeholders to evaluate the root causes and potential solutions for the lack of validated endpoints for use in clinical trials in many unmet medical needs. A persistent translational gap exists between biomarker discovery and regulatory acceptance that may be driven by an inconsistent qualification process, unclear evidentiary standards, and poor resourcing.
- Advance the use of Platform Technology Designations (PTD) with the goal of streamlining regulatory review by leveraging well-characterized technology that can be used across multiple drug products. Work to date to advance PTD has not resulted in drug development efficiencies. Existing guidance should be updated to clarify eligibility criteria, evidentiary requirements, and procedural efficiencies.
- With a focus on chronic diseases, explore the use of expedited drug development tools and innovative approaches with the goal of managing the high cost/risks associated with investments in these diseases. Consider the overall public health impact and apply a risk-based regulatory framework when determining when/how these tools may be utilized. Investment and innovation in drug research and development for highly prevalent chronic diseases has stalled in recent decades despite half of all Americans living with at least one chronic disease.
- Support efforts to fulfill PDUFA meeting management goals and evolve meetings best practices. Explore the potential for existing meeting types to be used more effectively to resolve urgent drug development questions. Sponsors need reliable and efficient mechanisms to engage with the FDA to reduce regulatory uncertainty and advance innovation.

New models for external engagement and transparency must be supported.

- Evolve the use of Advisory Committees (AC) to focus on questions of science rather than questions about the regulations and ensure proper training for AC members. Modernize conflict of interest requirements to ensure appropriate participation. ACs are critical to augment FDA expertise on emerging science and innovation, but their utilization has been fraught with accusations of misuse, lack of appropriate expertise, conflicts of interest, and underutilization of public/patient input.
- Support common platforms for shared learning across the innovation ecosystem. Fill FDA positions focused on consistently advancing the vision for regulatory science and ensuring consistent implementation/process. FDA leadership have publicly stated their focus on the value and urgency of regulatory innovation. However, regulatory science advances continue to be applied inconsistently across review divisions.

(iii). What policies would encourage the formation and scaling of regional innovation ecosystems that connect local businesses, universities, educational institutions, and the local workforce - particularly in areas where the Federal government has existing research assets like national laboratories or federally funded research centers?

Create an accelerated ecosystem

Policies and programs that directly support accelerated ecosystem creation serve as excellent opportunities to connect local businesses, universities, education institutions, and the local workforce. By providing incentives for stakeholders to collaborate on key projects, relationships and ecosystems may develop much faster than if they were left to organically grow.

Regional Technology and Innovation Hubs:

The EDA took significant steps towards forming and scaling local ecosystems with the Regional Technology and Innovation Hubs (Tech Hubs) program. Continued operation of this program including funding of existing Tech Hubs and designation of additional hubs in the United States will encourage further formation and scaling of local ecosystems.

- By design, Tech Hubs require consortia to consist of key stakeholders and support projects in workforce development, startup support, technology maturation, infrastructure, and governance. Consortia that receive Tech Hub designation also become eligible for further technical assistance, network-expansion, and additional funding opportunities through the EDA, the Department of Commerce, and other federal agencies.
- At present, 12 of the 31 Tech Hubs have received Implementation Awards. In September of 2025 a new NOFO opened to the remaining 19 Hubs that have not yet received an Award. The Tech Hubs program, established under the CHIPS and Science Act of 2022, was authorized to receive \$10 billion over five years. To date, Congress has appropriated approximately \$1 billion to the program. Continued appropriations for the Tech Hubs program to enable the EDA to continue providing Designated Tech Hubs with Implementation Awards, and Tech Hub applicants with Strategy Development Grants (SDG) that serve as a key local, strategic investment.

ARPANET-H Health Innovation Network:

- ARPANET-H is a nationwide innovation network that supports the Advanced Research Projects Agency for Health (ARPA-H). The Investor Catalyst Hub, based in Boston, MA, is the Hub of the hub-and-spoke model utilized by the program. With nearly 700 spoke members, the Investor Catalyst Hub was created with the goal of speeding up the transition of ideas into solutions by connecting institutions such as investors, incubators, accelerators, and researchers, with needed resources that others may have.

Invest in workforce training models

Biosciences workforce training is an excellent vehicle for further ecosystem creation and scaling. Existing federally funded programs and initiatives target high schools, vocational schools, community colleges, and universities, making Americans with all levels of education aware of the opportunities that exist within the biosciences sector. These programs share some common strategic goals to address gaps:

- Expanding the Pipeline: Building awareness of biotechnology careers in K-12 education, fostering links between high schools, community colleges, and four-year institutions, and recruiting talent from diverse populations, including veterans, and underemployed individuals.
- Industry Alignment: Ensuring training is based on industry-validated competencies and skills (e.g., in bioprocessing, quality assurance, bioinformatics) to directly meet employer needs.
- Alternative Credentials: Promoting alternatives to traditional four-year degrees, such as industry-validated certifications, certificate programs, and apprenticeships, to standardize competency assessment and increase the pool of skilled technicians.

Public-Private Partnerships:

The public-private partnership model for workforce training facilitates collaboration between the government, industry, and academia. By developing curricula in concert with industry members, non-profits, and educational institutions, local ecosystems are strengthened. The institutes below, established to accelerate advanced manufacturing play a significant role in workforce development for biomanufacturing and should be expanded to increase workforce capabilities around the country.

- The Bioindustrial Manufacturing and Design Ecosystem (BioMADE) is the DOD's Manufacturing Innovation Institute that focuses on advancing bioindustrial manufacturing. Its mission includes building a competitive workforce by creating partnerships with K-12 schools, community colleges, and universities to align education with industry needs and provide workshops and training.

- National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL): This public-private partnership is focused on accelerating biopharmaceutical innovation and provides extensive workforce development through curriculum creation, training programs, and resources for industry employees.

| *Other Supportive Workforce Training Programs:*

In addition to current public-private partnership models, continued support and investment in workforce training programs such as the efforts below from the National Science Foundation are needed. Like the public-private partnership model, continued funding for training and educational programs at local educational institutions provides significant opportunities for industry and academia to collaborate and expand the ecosystem.

- InnovATEBIO National Biotechnology Education Center: Funded by the NSF's Advanced Technological Education (ATE) program, this is a national network that supports biotechnology workforce education. It includes numerous college programs offering degrees and certificates in biotechnology and biomanufacturing, and it actively collaborates with industry members to ensure curricula are relevant.
- Experiential Learning for Emerging and Novel Technologies (ExLENT) Program: This program is designed to scale hands-on, work-based learning opportunities in emerging technology areas like biotechnology, helping to prepare students from both traditional and non-traditional backgrounds for skilled technical jobs. The biosciences is a dynamic and rapidly changing field, and the hand-on or "learning by doing" opportunities enabled by the ExLENT program provides Americans with the experience needed to retain a competitive edge through reskilling and upskilling.

(iv) How can Federal policies strengthen the role played by small- and medium-sized businesses as both drivers of innovation and as early adopters of emerging technologies?

Small- and medium-sized biotechnology companies play a critical role in the U.S. innovation ecosystem, serving both as primary drivers of early scientific breakthroughs and as early adopters of emerging technologies across drug discovery, development, and manufacturing. Federal policies can strengthen this role by reducing barriers to participation, improving access to capital and infrastructure, and aligning incentives with the unique risk profile of biotech innovation.

First, federal funding and contracting mechanisms should be tailored to the scale and constraints of small- and medium-sized biotech firms. Renewing, expanding, and modernizing programs such as SBIR and STTR—through larger award sizes, faster decision timelines, and greater flexibility in eligible costs—would enable smaller companies to advance high-risk, high-impact research. Streamlined application, reporting, and compliance requirements would further reduce administrative burdens that disproportionately affect smaller organizations.

Second, federal policies should improve access to shared infrastructure, data, and expertise. Small and mid-sized biotech companies often lack the capital to independently build advanced laboratories, manufacturing capabilities, or clinical trial networks. Policies that facilitate access to federal laboratories, biobanks, regulatory science resources, and public-sector clinical trial infrastructure—under clear, standardized partnership agreements—would accelerate innovation and adoption of emerging technologies.

Third, procurement and partnership policies should explicitly enable participation by smaller biotech firms. Increased use of milestone-based contracts, Other Transaction Authorities (OTAs), and phased procurement models would allow early-stage companies to demonstrate capability without requiring scale prematurely. Advance market commitments and predictable demand signals, particularly in areas such as pandemic preparedness and medical countermeasures, would further incentivize early adoption of novel platforms.

Fourth, federal policies should strengthen capital formation and de-risk early adoption of new technologies. Predictable and enhanced R&D tax incentives, refundable credits for pre-revenue companies, and co-investment models that leverage federal funding to crowd in private capital would improve the ability of smaller biotech firms to invest in emerging tools such as AI-enabled discovery, novel modalities, and advanced manufacturing.

Finally, a stable and predictable policy and regulatory environment is essential. Clear guidance on intellectual property protections, data rights, and regulatory expectations enables small- and medium-sized biotech companies to plan, partner, and scale effectively. Policies that promote regulatory science collaboration and early engagement with FDA can further support rapid and responsible technology adoption.

These approaches would strengthen the capacity of small- and medium-sized biotech companies to drive innovation, adopt emerging technologies, and contribute to a resilient, competitive U.S. biotechnology ecosystem that delivers new therapies for patients and strengthens public health preparedness.

(v) What empirically grounded findings from metascience research and progress studies could inform Federal grantmaking processes to maximize scientific productivity and increase total return on investment? Please provide specific examples of evidence-based reforms that could improve funding allocation, peer review, or grant evaluation.

BIO supports efforts to improve productivity and returns from investments in scientific research. Both the lack of speed and lower levels of risk tolerance in the Federal grantmaking process can have a direct impact on scientific productivity, and there are opportunities to improve this process to drive greater societal returns from investments in research. BIO supports greater experimentation with a wider variety of funding models to assess whether there are opportunities to assess the comparative impact of different models. The ultimate goal of such programs should be to create lessons that can inform future reforms and maximize the long-term value of the scientific output from federally funded research.

(vii) How can the Federal government support novel institutional models for research that complement traditional university structures and enable projects that require vast resources, interdisciplinary coordination, or extended timelines?

The traditional university structure for federally funded research has been an enormous boon to American patients and patients around the world in advancing the scientific knowledge needed to create new cutting-edge therapies. In addition to this structure, which the federal government should continue to robustly fund and support, new models can help advance research that may be ill-suited for the traditional university-based approach. This can include certain projects that require industrial-scale coordination across multiple enterprises, or that come from non-university research organizations formed to address specific scientific problems.

There are examples from biomedical research of multi-disciplinary, cross-cutting research consortia that are worth emulating and expanding. For example, the Accelerating Medicines Partnership (AMP) program is a public-private partnership among NIH, FDA, multiple life sciences companies, and nonprofit and other organizations. This cross-sector partnership enables agencies and partners to share expertise and assembled resources beyond that of any one individual entity. As a specific example, the Bespoke Gene Therapy Consortium is part of AMP, and works to establish platforms and standards to speed the development of "bespoke" or customized gene therapies. Another set of examples are the multiple disease-specific consortia which FDA fund at the Critical Path Institute, where FDA works with academic researchers and industry to pursue data sharing and other pre-competitive research initiatives. Funding such programs directly is a great example of how federal funders can support non-traditional projects that allow for greater coordination on longer time horizons, to address specific problems.

Regarding new collaborations, BIO also recommends that NIH seek to understand the root cause of shortcomings of previous collaborative models, such as the Helping to End Addiction Long-term (HEAL) initiative. The HEAL initiative demonstrated success at the preclinical stage. However, challenges emerged when the program moved into Phase I/II clinical development programs. BIO believes it would be worth investigating if this is due to 1) lack of volume in the pipeline, 2) legal/IP issues, or 3) if there is a loss of control over trial design, enrollment, or patient data that lead companies resist these partnerships at later stages. BIO believes that understanding why there was less collaboration at the clinical stage will allow NIH to develop new collaborative models with enhanced partnering between government, academia, and industry.

(viii) How can the Federal government leverage and prepare for advances in AI systems that may transform scientific research—including automated hypothesis generation, experimental design, literature synthesis, and autonomous experimentation? What infrastructure investments, organizational models, and workforce development strategies are needed to realize these capabilities while maintaining scientific rigor and research integrity?

Next-generation technologies like artificial intelligence, automation, and molecular engineering are poised to revolutionize biotechnology innovation. These tools enable faster drug discovery, more efficient manufacturing, real-time data analysis in clinical trials, and the design of novel therapeutics that were previously unimaginable. The nation that leads in deploying these technologies will not only dominate the future of biotech but also shape the trajectory of adjacent strategic sectors—such as defense, agriculture, energy, and advanced materials. To secure U.S. leadership, the federal government should invest in smart manufacturing infrastructure, create national centers of excellence to accelerate innovation, and cultivate a skilled workforce equipped to apply these technologies. Strong intellectual property protections will also be essential to safeguarding U.S. innovation and maintaining a competitive edge.

The use of artificial intelligence and machine learning (together: "AI") tools is becoming increasingly common, though not yet ubiquitous, among BIO's member companies, who deploy this technology to assist in drug discovery, clinical or field trial design, manufacturing process improvements, and a range of other applications. BIO applauds the Administration's interest in developing national policies for sustaining and enhancing America's AI preeminence in order to promote human flourishing, economic competitiveness, and national security. To that end, we would like to offer a few high-level recommendations.

Maintain flexibility to account for specific needs of different business models and industry sectors.

BIO members regard AI as an important and powerful addition to their arsenal of tools with which they create and accelerate innovation in an already comprehensively regulated space. When BIO members use AI (or other tools) to augment, for example, the discovery of new therapeutic molecules, they already must ensure compliance with highly specific regulatory schemes designed to ensure that new biotechnology products are researched, developed, and deployed safely, reliably, lawfully, and responsibly. We trust that the Administration will ensure that any new national AI policies will map smoothly onto existing sector-specific regulatory frameworks. This should be done in ways that draw on the experience and ongoing work of specialized regulatory agencies and their regulated industries, and that enhance, rather than encumber, the efficient operation of these regulatory frameworks.

Develop national uniformity.

Increasing commercial use of AI tools and the related collection, use, and dissemination of consumer data is already accelerating innovation in an already comprehensively regulated space. There is a risk that new national AI policies could stand in tension with a patchwork of state health data privacy and consumer protection laws in ways that create nonuniformity, business uncertainty, and unrealistic compliance and reporting burdens. While much can be learned from ongoing state efforts in AI safety, accountability, and transparency, the Administration should push for harmonization across different developing state frameworks and consider whether certain aspects of AI governance should be reserved exclusively to the United States.

Maintain the ability of US businesses and researchers to responsibly collect, use, and aggregate data across state lines and international borders.

AI tools cannot be developed or deployed without access to large and high-quality data sets. As the Administration considers the development of national AI policies, it should ensure that biotechnology firms can access and utilize the most robust and comprehensive data sets, not just for research but as part of the development of accurate AI systems. Ability to access data in a timely and efficient manner drives biotechnology innovation that is critical to our success in the life sciences industry. The Administration should work with our global allies to protect private sector access to the best genomic, genetic and biologic data. Should key nations take steps to block their data from inclusion in public databases, U.S. AI systems may not be as accurate or efficient and could slow our industry's ability to innovate and compete.

At the same time, the Administration should ensure that proprietary or sensitive data sets are given adequate protection to guard against not only data theft, but IP theft or duplication of products. Open AI models have the potential to expose large or sensitive data sets, which are under threat of theft by adversarial foreign actors especially for the health sector. BIO encourages any AI policy to consider public sector data sets, those that belong to private industry, and those developed within academia and the specific, nuanced steps needed for each individually. To maintain U.S. dominance in AI and biotechnology, AI inputs must be given the same protections as AI products.

Considerations of AI use in drug development.

As a transformative tool, AI will soon span the full range of drug development activities – from discovery and preclinical testing to post-approval studies, pharmacovigilance, and manufacturing. The FDA's current regulatory framework ensures the safety and efficacy of products approved for U.S. patients, guided by the principle of assessing the benefit of a medical product against its potential risks to patients. Accordingly, the risks of incorporating AI across drug discovery and development should be considered on a use-case basis. This would include a consideration of the AI model influence (the weight of the model in the totality of evidence for a specific decision) and decision consequence (the potential consequences of a wrong decision).

BIO agrees with the FDA that the potential patient risk related to the use of AI in drug discovery is low. Patients will generally benefit from reductions in research time for the discovery of molecules for further investigation. When it comes to clinical trials, AI has the potential to be useful in, for example, site selection, recruitment, and demographic balancing of control and treatment groups. However, as AI becomes more integrated in the actual design of clinical trials, the assessment of endpoints, and the manufacturing of approved therapies, the associated risks may increase.

In every phase of drug development, industry and regulators should work collaboratively to establish best practices for AI development and use and the type and amount of evidence adequate for the FDA to accurately assess whether AI is fit for purpose for the specific context of use. Evidence requirements will vary based on use, and industry and regulators should work together to create clear expectations. As AI and machine learning has increased in salience over the past decade, the FDA has already set forth a number of guidance documents and other publications. These materials provide a valuable beginning and a basis for refinement.

BIO has encouraged FDA to consider the following recommendations for further engagement between industry and regulators:

- (i) Clarify the scope of regulatory oversight to increase stakeholder understanding. The primary focus should be on areas where FDA has regulatory authority.
- (ii) Strive for consistent terminology, such as the FDA's Digital Health and Artificial Intelligence Glossary. We believe the FDA could take a leading role in further defining terms critical to the regulatory process.
- (iii) Adapt "Good Machine Learning Practices" (GMLP) to the use of AI in drug development, using medical device practices as a starting point. The adapted Practices should include considerations for AI model design, development, testing, and performance. The standards should specify the degree of transparency required for the Agency to evaluate regulatory submissions.
- (iv) Draft a risk assessment and credibility framework for AI for different contexts of use, such as clinical research and manufacturing. New frameworks should build on established ones when possible.
- (v) Clarify regulatory expectations for validation of AI models. Detailed expectations for testing, evaluation, verification, and validation will enable better understanding among developers.
- (vi) Clarify requirements for regulatory submissions and commercially confidential information. Clear and detailed enumeration of FDA expectations on information to include in dossiers is essential. Transparency needs to be balanced with the protection of innovation for drug and technology developers.
- (vii) Adopt an agile approach to regulatory oversight to ensure it is responsive to changing technology. Given the early stage of AI use in drug development and the emergence of new technologies and best practices, BIO has recommended that the FDA consider principles-based recommendations, Q&As, and discussion papers rather than formal guidance.
- (viii) Step up discussions with appropriate foreign drug regulatory authorities about harmonizing regulatory principles applicable to AI use.

Maintain the ability to leverage Intellectual property (IP).

BIO members use AI as a tool to augment a wide range of research and development activities, and it is critical that innovative products that were discovered and developed with the use of AI remain eligible for IP protection. However, troubling questions have been raised about the patentability of inventions where the inventor's discovery was facilitated in important ways by the use of an AI tool. Current examination guidance in the U.S. Patent and Trademark Office (USPTO) grapples with these questions and seems to offer a workable framework for now, but it applies U.S. patent law concepts such as "conception" and joint inventorship in new, unfamiliar, and ill-fitting ways. It will be important to carefully monitor how well these historic tests will work to account for the impact of AI and other computational tools on the patentability of resulting inventions.

It will also be important to monitor whether the United States may be deviating in important and unnecessary ways from how foreign patent systems address similar questions about the use of AI and other computational tools in the invention process. The USPTO Guidance implicitly but clearly casts doubt upon the substantive patentability of inventions that result from the use of AI. It suggests that even where there has been some human involvement, there may be no patentable invention because no natural person contributed "enough" -- and the specter of unpatentability is there even if the invention is otherwise perfectly novel, unobvious, and properly described. Foreign patent offices that have confronted the question, in contrast, don't seem to view the involvement of computational tools as a potentially patentability-destroying event in the way the USPTO Guidance implies.

Finally, BIO has cautioned the USPTO and public policymakers against premature and reflexive actions in response to the increasing adoption of AI and other computational tools among US innovators. There is nothing inherently harmful or problematic about novel and unobvious inventions just because they were generated with the help of AI tools. In fact, public discourse should celebrate the emergence of efficiency-enhancing tools that allow more US innovators, including in biotechnology, to make more inventions more quickly, cheaply, and efficiently.

(ix) What specific Federal statutes, regulations, or policies create unnecessary barriers to scientific research or the deployment of research outcomes? Please describe the barrier, its impact on scientific progress, and potential remedies that would preserve legitimate policy objectives while enabling innovation.

Incentivizing Small Biotech Investment: Angel Investor Tax Credit

Modeled after numerous state programs, a federal Angel Investor Tax Credit would provide an incentive for high-net-worth individuals to invest in emerging biotech companies. To be eligible for this credit, investors would have to make an investment in a company with fewer than 500 employees performing qualifying research. The credit would be equal to 50% of their investment, thus providing an important tax incentive for investment in innovative research-intensive industry.

Stimulating Private Capital for Biotechnology: R&D Partnership Structures

Due to the drawn-out nature of the drug development process, small biotechnology companies often have difficulty obtaining early-stage financing for their research and development. Given that smaller biotech companies are not yet profitable, they are unable to immediately use their tax assets to offset income. New partnership structures wherein biotech companies would enter into a joint venture with high-net-worth investors and flow through certain tax assets (i.e., tax credits and losses) from the biotech company or its projects to the investors would provide more immediate benefits by allowing investors to offset their income with the company's tax assets, thus stimulating private investment.

Reducing Time, Cost and Complexity of Drug Development

One of the most promising areas to reduce barriers to critical research is to reduce the time, cost, and complexity of drug development, especially preclinical and Phase 1 development. BIO has been in communication with FDA on this topic, and we look forward to having the opportunity to continue to engage with the agency. Policies to address in this space include:

- Reducing administrative burdens in clinical trials (e.g., streamline Form 1572 reporting requirements, standardize informed consent forms, etc.);
- Supporting single Institutional Review Boards (sIRBs);
- Advancing the development and use of New Approach Methods (NAMs) to reduce animal testing and increase the efficiency and accuracy of preclinical testing;
- Clarifying toxicology data requirements minimally necessary to initiate clinical testing;
- Furthering the application of Quality Risk Management in manufacturing; and
- Ensuring rapid/frequent communications with sponsors; especially during pre/early-IND period.

(x) How can Federal programs better identify and develop scientific talent across the country, particularly leveraging digital tools and distributed research models to engage researchers outside traditional academic centers?

Federal investment in the current and future workforce is critical to better identifying and developing U.S. scientific talent and supporting advanced biotechnology and biomanufacturing operations. A strong domestic biomanufacturing ecosystem requires a diverse set of skills - from manufacturing operations and quality control to biomanufacturing construction and R&D. These roles span a wide range of educational backgrounds, including technical certifications, associate and bachelor's degrees, and terminal degrees such as PhDs. CDMOs and biopharmaceutical companies often face difficulties recruiting skilled workers to non-traditional biotech hubs. Federal and state governments can play a vital role by offering targeted incentives to attract and retain talent in diverse geographic regions across the country. We would like to offer a few high-level recommendations.

Education and Training Pathways

- **Establish Standardized Educational Pathways for Biomanufacturing Careers.** Create a nationally coordinated framework for biomanufacturing education, including two-year degree programs, modular training, and micro-credentialing aligned with current Good Manufacturing Practice (cGMP) standards. A standardized credential system ensures consistent training quality, accelerates workforce readiness, and enables mobility across biotech hubs. Flexible, stackable pathways will meet industry demand while expanding access to high-value careers for diverse learners.
- **Fund Workforce Development for Institutions and Learners.** Provide federal and state funding for accredited biomanufacturing training programs, including tuition grants, earn-and-learn apprenticeships, and institutional support for curriculum development and infrastructure. Millions of Americans without college degrees represent an untapped workforce. Funding incentives reduce barriers to entry, promote inclusive economic growth, and empower educational institutions to build capacity and meet urgent labor needs.
- **Expand Cross-Training for Science and Technology Professionals.** Support accelerated certificate and retraining programs that equip current science and technology professionals with hands-on biomanufacturing and regulatory skills. Retraining leverages existing technical talent and shortens time to workforce.

deployment. Applied coursework and apprenticeships provide industry-ready skills, strengthening the talent pipeline and maximizing return on prior education investments.

- Enhance STEM Education. Expanding graduate fellowships and increasing investment in two- and four-year degree programs would help strengthen the pipeline. A stronger emphasis on science and associated trades in the U.S. education system is essential for building long-term capacity.
- Leverage Community College Programs. Investments can be used to establish targeted training centers to efficiently prepare a skilled workforce, especially in manufacturing operations and quality control. Special attention should be given to two-year programs at community colleges. Models like Ireland's National Institute for Bioprocessing Research and Training (NIBRT), and its counterpart K-NIBRT in South Korea, have been very effective. For instance, since its founding in 2011, NIBRT has trained over 50,000 individuals.^[1]

Incentives and Support Mechanisms for Workforce Growth and Development

- Encourage the use of employer incentives such as tax credits for companies offering tuition coverage or in-house training programs and bonus payroll tax credits for workforce development activities would encourage employers to increase workforce growth and development.
- Increase federal and state Investments by expanding public grants and public-private partnerships for terminal degrees (M.D./Ph.D.) in critical fields, targeting loan forgiveness programs to attract students into biomanufacturing and life sciences, and providing NIH funding for private-sector postdoctoral positions.

^[1] National Institute for Bioprocessing Research and Training. (2025, April 11). *NIBRT publishes Annual Report 2024*. Retrieved from <https://www.nibrt.ie/nibrt-publish-annual-report-2024/>

(xi) How can the Federal government foster closer collaboration among scientists, engineers, and skilled technical workers, and better integrate training pathways, recognizing that breakthrough research often requires deep collaboration between theoretical and applied expertise?

To bolster the biotechnology ecosystem, which relies on experts in theory through application, the Federal government can foster closer collaboration among scientists, engineers, and skilled technical workers, and better integrate training pathways, by incentivizing the creation of regional biomanufacturing hubs. These centers can anchor ecosystems of innovation, workforce development, and local supply chain resilience. An example of a program that could be leveraged for building additional biotechnology manufacturing capacity is the Tech Hubs Program through the U.S. Economic Development Administration.^[1] Six of the thirty-one sites are already designated for biotechnology manufacturing, and the knowledge and best practices learned through the development of these hubs could be used to build out additional infrastructure. To further incentivize investment, the Administration could consider designating specific regions as biomanufacturing zones - similar to the Opportunity Zones framework from President Trump's first term - tailored specifically to the needs of the biotechnology industry.

^[1] U.S. Economic Development Administration. (n.d.). Regional Technology and Innovation Hubs (Tech Hubs). Retrieved May 6, 2025, from <https://www.eda.gov/funding/programs/regional-technology-and-innovation-hubs>

(xiii) How can the Federal government strengthen research security to protect sensitive technologies and dual-use research while minimizing compliance burdens on researchers?

The biotechnology sector strongly supports biosafety and biosecurity practices that protect sensitive technologies and mitigate risks associated with dual-use research, while ensuring that legitimate scientific work critical to national security, preparedness, and innovation can proceed without unnecessary barriers. Effective research security policies must be risk-based, scientifically grounded, and designed to focus enhanced oversight where it is most warranted.

A foundational element of this approach is maintaining clear, precise definitions that distinguish between categories of dual-use research. **Dual-use research** broadly refers to life sciences research conducted for legitimate scientific, medical, or public health purposes that could, in theory, be misapplied. This category encompasses a wide range of essential research activities that underpin vaccine development, diagnostics, therapeutics, and other medical countermeasures.

By contrast, **dual-use research of concern (DURC)** represents a defined subset of dual-use research that meets specific criteria indicating that the work could reasonably be anticipated to generate knowledge, products, or technologies that pose a significant risk to public health or national security if misused. OSTP policy has historically limited DURC to research involving a small number of high-consequence pathogens and a defined set of experimental outcomes that could meaningfully increase risk.

Maintaining this distinction in future OSTP guidance documents is critical. Conflating dual-use research with dual-use research of concern risks subjecting low-risk, high-value research to heightened scrutiny, increasing compliance burdens without improving security outcomes and potentially discouraging work that is essential to national preparedness.

These same principles of clarity, proportionality, and scientific grounding should also guide Federal approaches to emerging biosecurity safeguards, including **gene synthesis screening**.

As synthetic nucleic acid technologies become more accessible, consistent, and risk-based gene synthesis screening standards represent an important opportunity to strengthen biosecurity without impeding legitimate research and development. Many U.S. providers already conduct voluntary sequence and customer screening, but uniform Federal expectations can reduce uneven practices, clarify responsible conduct, and reinforce U.S. leadership in biosecurity. To be effective and sustainable, gene synthesis screening frameworks should be narrowly scoped to sequences with plausible biosafety or biosecurity significance, operationally feasible for providers of different sizes, and designed to protect proprietary data and sensitive information. Overly broad definitions or prescriptive requirements risk increasing costs, slowing research timelines, and unintentionally driving sensitive work to less regulated jurisdictions, undermining both security and competitiveness.

A research security framework grounded in clear definitions, targeted oversight, and practical safeguards can protect sensitive technologies and address dual-use risks while minimizing unnecessary compliance burdens. This approach preserves the strength of the U.S. research enterprise, sustains innovation critical to biodefense, and ensures that security measures enhance, rather than impede, national preparedness and scientific leadership.

Conclusion:

BIO and our member companies share the Administration's commitment to the development and implementation of policies that will encourage robust scientific advancement in the biotechnology sector. We stand ready to work closely with the OSTP to continue to create a clear, sustainable and predictable environment at both the federal and state level that will encourage increased scientific advances in health for all Americans. We would be pleased to meet with the Office to further discuss our recommendations.

Sincerely,

Phyllis A. Arthur
EVP & Head, Healthcare Policies and Programs

**Statement of the Consumer Technology Association “Advancing
America’s AI Action Plan” House Subcommittee on Research and
Technology**

January 14, 2026

The Consumer Technology Association (CTA)[®], on behalf of its more than 1200 member companies, applauds Chairman Jay Obernolte and Ranking Member Haley Stevens of the House Subcommittee on Research and Technology for convening today’s hearing with OSTP Director Michael Kratsios on the White House AI Action Plan.

Artificial Intelligence (AI) is the defining platform shift of our lifetimes. Last week, CTA concluded a successful CES[®] 2026, where more than 148,000 attendees, more than 4100 exhibitors, and hundreds of government officials from across the globe convened to see firsthand how AI is empowering individuals and businesses of every size. Attendees saw how AI is creating breakthroughs in health, energy, agriculture, mobility, and countless other fields. This progress will only accelerate, driving our economy and improving lives on a scale comparable to innovations like electricity or the internet. Director Kratsios himself participated in a fireside chat with CTA President Kinsey Fabrizio, where they discussed these exact topics¹. We were proud to host him and encouraged by this Administration’s continued efforts to advance American AI dominance.

President Trump and Director Kratsios recognize policy must match the promise and urgency of the moment. The AI Action Plan is bold, pragmatic, and exactly what America needs to ensure our innovation leadership. By reaffirming the use of publicly available data as the foundation for AI training, prioritizing R&D, and calling for an end to the state-by-state patchwork of AI regulation, the Administration ensures American companies can compete and win the global AI race. Congress also has a vital role to play, and today’s hearing is a strong display of the leadership and action necessary. The next steps are clear: enshrine the national framework, prevent harmful fragmentation, and unleash the full power of U.S. innovation.

CTA and our members are committed to ensuring the United States maintains and expands its AI leadership. We look forward to continued engagement with policymakers to ensure America seizes the promise of this Second Renaissance.

¹ <https://www.ces.tech/videos/americas-ai-future-a-fireside-chat-with-michael-kratsios/>

Kinsey Fabrizio
President Consumer Technology Association

Gary Shapiro
Executive Chair and CEO
Consumer Technology Association

###



January 14, 2026

The Honorable Brian Babin (R-TX)
Chairman
House Committee on Science, Space, and Technology

The Honorable Zoe Lofgren (D-CA)
Ranking Member
House Committee on Science, Space, and Technology

The Honorable Jay Obernolte (R-CA)
Chairman
Subcommittee on Research and Technology
House Committee on Science, Space, and Technology

The Honorable Haley Stevens (D-MI)
Ranking Member
Subcommittee on Research and Technology
House Committee on Science, Space, and Technology

Re: Hearing on Advancing America's AI Action Plan

Dear Chairman Babin, Ranking Member Lofgren, Chairman Obernolte and Ranking Member Stevens:

On behalf of the Software & Information Industry Association (SIIA), we write to provide views relevant to the Subcommittee's January 14 hearing on *Advancing America's AI Action Plan*, with a focus on how Congress can build on the foundation of the AI Action Plan to further U.S. innovation and leadership in AI. We request that this letter be included in the record of the hearing.

SIIA's nearly 400 members, including creators of software and platforms used by millions worldwide, are at the forefront of artificial intelligence innovation. Our member companies range from global leaders in AI models and applications, companies specializing in data analytics and information services, academic and scientific publishers, education technology companies, and the global financial information and market data community.

SIIA appreciates that the AI Action Plan embraces a risk-based, pro-innovation policy

framework designed to power the future of the U.S. AI development.¹ As Congress assesses the Administration's AI actions to date, SIIA urges lawmakers to view the AI Action Plan not as an end state, but as a foundation for passing durable federal legislation as a next step. To that end, SIIA's recently released Federal AI Legislative Roadmap provides a comprehensive blueprint for pursuing a federal AI policy pathway across four pillars: foundation model oversight; regulation of AI deployment; domestic and international regulatory harmonization; and building a pro-innovation infrastructure.² The Roadmap identifies existing federal bills that will advance each of these pillars and recommends new approaches to fill critical gaps for a comprehensive legislative framework. Below, we outline the pillars of the Roadmap and convey how it can inform federal legislative action following this hearing.

Enact Baseline Safety and Security Guardrails for Foundation Models

The AI Action Plan rightly calls for prioritizing safe, secure, and competitive AI technology development. To transform these priorities into lasting policy, SIIA's Roadmap encourages Congress to codify baseline disclosure and reporting requirements for foundation model developers, ensuring these powerful core models are developed with protections against national security and public safety risks. This legislation should expressly preempt state laws that seek to regulate foundation model safety and security. Preemption in this area is critical because foundation model evaluation requires significant compute resources, deep expertise in both technology and national security, and clarity. Fragmented compliance across the country will impose costs that undermine innovation and may not improve safety and security benchmarks. Congress should also empower NIST and the Center for AI Standards and Innovation (CAISI) to develop voluntary consensus standards and risk frameworks, and provide them statutory backing to guide evaluation practices across sectors. Additionally, Congress should pursue legislation that would create a central node for incident reporting and cybersecurity coordination, as this is central to AI foundation model governance and a critical area where industry and government collaboration can improve security across the AI ecosystem.

Regulating Uses Rather Than Technologies

The AI Action Plan centers on accelerating innovation and reducing regulatory friction. SIIA's Roadmap similarly recommends Congress adopt risk-based, use-based, sector-specific requirements regulating specific applications of AI where real harm is evident rather than imposing broad technology mandates. SIIA's Roadmap recommends Congress 1) direct a comprehensive gap analysis; 2) enable sector-specific applications of AI through testbeds and sandboxes; and 3) fill gaps involving high-risk use-cases.

Promote a Federal-Led Harmonization

¹ See, e.g., SIIA; [SIIA Commends White House on the AI Action Plan](#) (July 23, 2025); SIIA; [The White House AI Action Plan Sets the Stage for U.S. Global Leadership](#), (July 24, 2025).

² SIIA, [Federal AI Legislative Roadmap](#) (December 2025) (attached).

Fragmented state AI laws are already creating burdens for innovators and discouraging nationwide deployment. SIIA's Roadmap proposes that Congress establish federal preemption for state AI rules that diverge from a uniform, risk-based national framework — while permitting limited state authority where appropriate. SIIA also encourages Congress to assist the efforts of the Administration in promoting harmonization of international AI governance. This includes promoting U.S. participation in international AI standards-setting bodies and urging the Administration to pursue recognition of U.S. industry-led standards, and ensure domestic frameworks are interoperable with global partners. The federal-led policy harmonization approach outlined in SIIA's Roadmap will help preserve the U.S. domestic AI innovation and support global competitiveness.

Build Pro-Innovation Infrastructure

The AI Action Plan's emphasis on expanding research infrastructure and workforce readiness reflects shared national priorities. Congress should pass legislation to promote innovation and competition such as codification of the National AI Research Resource (NAIRR), advance AI literacy, and address the needs of workers by strengthening public-private collaboration to build a future-ready workforce.

Conclusion

SIIA supports the Subcommittee's efforts to elevate the discussion around federal AI policy and reiterate that the AI Action Plan provides a meaningful federal strategy. However, durable legislative avenues grounded in the principles of foundation model security, use-based regulation, harmonization, and pro-innovation infrastructure are essential for a federal AI framework with longevity. We encourage the Committee to review SIIA's Federal Legislative Roadmap for additional detail on the recommendations outlined above. SIIA stands ready to work with Congress to refine and enact legislation consistent with this Roadmap in order to advance U.S. AI leadership.

Sincerely,

Paul Lekas
Executive Vice President
Global Public Policy & Government Affairs
Software & Information Industry Association

LETTER SUBMITTED BY REPRESENTATIVE ZOE LOFGREN



PRESIDENT

John Formella
New Hampshire
Attorney General

PRESIDENT-ELECT

William Tong
Connecticut
Attorney General

VICE PRESIDENT

Marty Jackley
South Dakota
Attorney General

IMMEDIATE PAST PRESIDENT

Letitia A. James
New York
Attorney General

Brian Kane
Executive Director

1850 M Street NW
12th Floor
Washington, DC 20036
(202) 326-6000
www.naag.org

November 25, 2025

The Honorable Mike Johnson
Speaker
U.S. House of Representatives
Washington, DC 20515

The Honorable Hakeem Jeffries
Minority Leader
U.S. House of Representatives
Washington, DC 20515

The Honorable John Thune
Majority Leader
U.S. Senate
Washington, DC 20510

The Honorable Chuck Schumer
Minority Leader
U.S. Senate
Washington, DC 20510

Dear Speaker Johnson, Majority Leader Thune, Minority Leader Jeffries,
and Minority Leader Schumer:

The undersigned 36 state attorneys general write to reiterate our opposition to a moratorium on state laws addressing artificial intelligence. While AI promises to be a transformative technology in numerous fields, it also poses significant risks—notably to the most vulnerable among us, our children. States must be empowered to apply existing laws and formulate new approaches to meet the range of challenges associated with AI.

We imagine that you hear concerns about AI from your constituents almost daily. We are seeing scams powered by AI-generated deepfakes, social media profiles, and voice clones.¹ We are also deeply troubled by sycophantic and delusional generative AI outputs plunging individuals into spirals of mental illness, suicide, self-harm, and violence.² And we are concerned that AI chatbots and “companions”

¹ See, e.g., *So-called ‘grandparent scams’ target senior citizens*, ABC News (Sept. 25, 2025), <https://abcnews.go.com/Technology/video/called-grandparent-scams-target-senior-citizens-125917620>; California Dept. of Financial Protection & Innovation, *AI Investment Scams are Here, and You’re the Target* (last visited Nov. 20, 2025), <https://dfpi.ca.gov/news/insights/ai-investment-scams-are-here-and-youre-the-target/>; Jules Roscoe, *Deepfake Scams Are Distorting Reality Itself*, Wired (June 6, 2025), <https://www.wired.com/story/youre-not-ready-for-ai-powered-scams/>.

² See, e.g., Kashmir Hill, *They Asked an A.I. Chatbot Questions. The Answers Sent Them Spiraling*, NY Times (June 13, 2025), <https://www.nytimes.com/2025/06/13/technology/chatgpt-ai-chatbots->

are engaging children in highly inappropriate ways, including with conversations that feature graphic romantic and sexual roleplay, encouragement of suicide, promotion of eating disorders, and suggestions to prioritize use of the AI at the expense of connecting with friends and loved ones in real life.³ These are just a few issues at the forefront—with this rapidly evolving technology, additional and unforeseeable problems are certain to arise.

It is imperative that states be able to address these kinds of challenges. Indeed, many have started to do so. States have already pioneered multiple laws that target specific harms associated with the use of AI. As a coalition of state attorneys general noted in a letter to you in May, among these carefully considered and narrowly tailored laws are

[l]aws designed to protect against AI-generated explicit material, prohibit deep-fakes designed to mislead voters and consumers, protect renters when algorithms are used to set rent, prevent spam phone calls and texts, require basic disclosures when consumers are interacting with specific kinds of AI, and ensure identity protection for endorsements and other AI-generated content. Perhaps most notably, of the twenty states that have enacted comprehensive data privacy legislation, the overwhelming majority included provisions that give consumers the right to opt out of specific kinds of consequential, automated decision-making and require risk assessments before a business can use high-risk automated profiling.⁴

These complement longstanding consumer protection statutes prohibiting unfair and deceptive conduct that we are well accustomed to enforcing as state attorneys general.

Broad preemption of state protections is particularly ill-advised because constantly evolving emerging technologies, like AI, require agile regulatory responses that can protect our citizens. This regulatory innovation is best left to the 50 states so we can all learn from what works and what does not. New applications for AI are regularly being found for healthcare, hiring, housing markets, customer service, law enforcement and public safety, transportation, banking, education, and social media. We remain hopeful that this technology

conspiracies.html; Julie Jargon, *He Had Dangerous Delusions. ChatGPT Admitted It Made Them Worse*, Wall Street Journal (July 20, 2025), <https://www.wsj.com/tech/ai/chatgpt-chatbot-psychology-maniac-episodes-57452d14>.

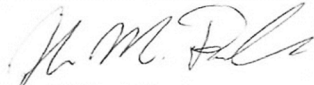
³ See, e.g., Rihita Chatterjee, *Their teenage sons died by suicide. Now, they are sounding an alarm about AI chatbots*, NPR (Sept. 19, 2025), <https://www.npr.org/sections/shots-health-news/2025/09/19/nx-s1-5545749/ai-chatbots-safetyopenai-meta-characterai-teens-suicide>; Jeff Horwitz, *Meta's AI Rules Have Let Bots Hold 'Sensual' Chats with Kids, Offer False Medical Info*, Reuters (Aug. 14, 2025), <https://www.reuters.com/investigates/special-report/meta-ai-chatbot-guidelines/>.

⁴ Letter from the National Association of Attorneys General to the Honorable Mike Johnson, John Thune, Hakeem Jeffries, and Chuck Schumer (May 16, 2025), available at https://ncdoj.gov/wp-content/uploads/2025/05/2025.05.15-Letter-to-Congress-re-Proposed-AI-Preemption-_FINAL-.1.pdf.

will be used to make people healthier, wealthier, happier, and safer, but cannot overlook that this will not always be the case.

These circumstances demand giving states leeway to formulate prudent health and safety regulations as this country's laboratories of democracy, while adopting effective, thoughtful federal regulation. Federal inaction paired with a rushed, broad federal preemption of state regulations risks disastrous consequences for our communities.

If Congress is serious about grappling with how AI's emergence creates opportunities and challenges for our safety and well-being, then the states look forward to working with you on a substantive effort. AI will cause tidal waves in our public safety, national security, economy, and health, and the United States needs to be ready to be an international leader. This moratorium would put us behind by tying states' hands and failing to keep up with the technology, and so we ask Congress not to inject an AI moratorium in upcoming appropriations legislation.



John M. Formella
New Hampshire Attorney General



Letitia James
New York Attorney General



Jeff Jackson
North Carolina Attorney General



Derek Brown
Utah Attorney General



Gwen Tauiliili-Langkilde
American Samoa Attorney General



Kris Mayes
Arizona Attorney General



Rob Bonta
California Attorney General



William Tong
Connecticut Attorney General



Kathleen Jennings
Delaware Attorney General



Brian Schwalb
District of Columbia Attorney General



Anne E. Lopez
Hawaii Attorney General



Raúl Labrador
Idaho Attorney General



Kwame Raoul
Illinois Attorney General



Todd Rokita
Indiana Attorney General



Kris Kobach
Kansas Attorney General



Liz Murrill
Louisiana Attorney General



Aaron M. Frey
Maine Attorney General



Anthony G. Brown
Maryland Attorney General



Andrea Joy Campbell
Massachusetts Attorney General



Dana Nessel
Michigan Attorney General



Keith Ellison
Minnesota Attorney General



Lynn Fitch
Mississippi Attorney General



Aaron D. Ford
Nevada Attorney General



Matthew J. Platkin
New Jersey Attorney General



Raúl Torrez
New Mexico Attorney General



Edward Manibusan
Northern Mariana Islands Attorney General



Dave Yost
Ohio Attorney General



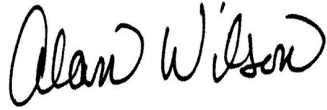
Dan Rayfield
Oregon Attorney General



Dave Sunday
Pennsylvania Attorney General



Peter F. Neronha
Rhode Island Attorney General



Alan Wilson
South Carolina Attorney General



Jonathan Skrmetti
Tennessee Attorney General



Gordon C. Rhea
U.S. Virgin Islands Attorney General



Charity Clark
Vermont Attorney General



Nick Brown
Washington Attorney General



Joshua L. Kaul
Wisconsin Attorney General