

DOE launches Quantum Genesis initiative

By **Clare Zhang**

The Department of Energy announced on 23 June a new initiative to develop and deploy “the world’s first fault-tolerant, scientifically relevant quantum computing capability” by 2028. The announcement followed a pair of executive orders signed the day before by President Trump to bolster quantum information science and technology and to direct the implementation of post-quantum cryptography standards.

The Quantum Genesis initiative, DOE says, will be a foundational element of its larger Genesis Mission, the national effort to advance scientific discovery and technological innovation by using AI. “Just as telescopes allowed us to explore the cosmos, advanced quan-

tum computers will enable us to peer into the fundamental laws of nature with unparalleled precision,” DOE Undersecretary for Science Darío Gil says in the announcement.

The initiative encompasses three priorities. DOE will create a national quantum supercomputing user facility that, when integrated with DOE’s other high-performance computing and AI systems, will form “one of the most powerful discovery platforms ever conceived,” the announcement states.

The department will also identify and implement scientific applications of quantum computing. Finally, DOE will hold a competition in 2028 to demonstrate fault-tolerant quantum systems, targeting “critical scientific applications,” including chemistry, materials science, and both plasma and high-energy physics.

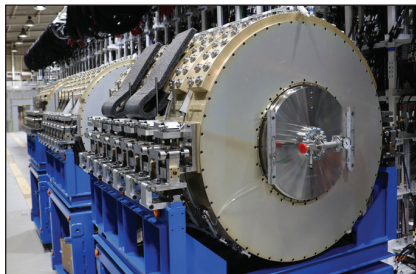
The executive order on bolstering quantum science and technology directs other agencies, including NSF, the Commerce Department, and the Department of Defense, to support the effort to build DOE’s new quantum computer.

House Science Republicans examine grant fraud

By **Clare Zhang**

During a 24 June hearing about the False Claims Act (FCA), the federal law that imposes civil penalties for misuse of government funds, Republicans on the US House Committee on Science, Space, and Technology floated several ideas to help combat grant fraud.

In the hearing, Republicans raised concerns about lost federal funds and questioned witnesses from NSF, NASA, and the Department of Justice on potential safeguards. Democrats accused Republicans of using the issue of grant fraud to justify funding cuts, and they expressed concerns about the DOJ’s recent use of the FCA to investigate federal funding recipients for engaging in diversity, equity, and inclusion practices.



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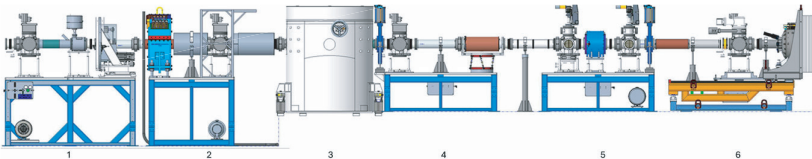
Fellows will also have access to an NNSS mentor and state-of-the-art facilities and technology.



The Nevada National Security Sites is proud to announce the Bruno Rossi Distinguished Postdoctoral Fellowship in Science and Technology, established in honor of Dr. Bruno Rossi, an experimental physicist who developed novel instrumentation to capture extremely fast physics with the limited electronics of his time. This prestigious fellowship aims to inspire the next generation of researchers to drive advancements in national security.

The Bruno Rossi Distinguished Postdoctoral Fellowship is up to a three-year program for recent PhD graduates (within five years of graduation) with expertise in accelerator physics and a passion for applying data science, artificial intelligence, and machine learning to model, control, and optimize complex systems. The Rossi Fellow will be instrumental in developing and demonstrating next-generation capabilities for the Scorpions accelerator and allied radiographic systems.

Specific initiatives include advances in the theory, computational modeling, and/or machine learning applications; strong focus will be placed on computational efforts aligning with electron-beam target interactions and/or other accelerator beam physics.



The Downstream Transport (DST) of the Scorpions accelerator handles critical safety, protection, and diagnostic functions while converting the electron beam to x-rays. Its sections perform debris mitigation (1), specialized beam transport (2), safety stops (3), transport to final focus (4), in-flight imaging and diagnostics (5), and final focusing onto the target (6).

For more information on this year’s Rossi Fellowship and to learn how to apply, scan this QR code.



Representative Rich McCormick (R-GA), chair of the investigations and oversight subcommittee, cited a 2024 Government Accountability Office report that found the government loses between \$233 billion and \$521 billion annually to fraud. He said that “federally funded research represents a meaningful share of that exposure.” Although most researchers are doing “honest work,” McCormick said, “we have an obligation to ask whether the systems meant to catch the exceptions are keeping pace with the scale of federal investment and how high the stakes have become.”

Rep. Daniel Webster (R-FL) noted that there is no government-wide framework for grant applicants to disclose their foreign ties. Brenna Jenny, the deputy assistant attorney general for the commercial litigation branch of the DOJ’s civil division, said her department would be willing to work with Congress on the issue.

Robert Steinau, a senior official who is performing the duties of inspector general at NASA, said his office is “reviewing ways to bolster our oversight capabilities,” including by initiating site visits to grantees.

Rep. Suzanne Bonamici (D-OR) said Republicans had called for a hearing on the FCA to justify slashing funding “under the auspices of combating fraud.” Subcommittee Ranking Member Emilia Sykes (D-OH) also questioned Republicans’ motives, saying Republicans were using the hearing to “talk about anything other than what the Trump administration is actually doing for American science.”

Pentagon report flags deterioration of defense research labs

By **Lindsay McKenzie** and **Aashreya Govindu**

A review of the US military’s research, development, test, and evaluation infrastructure warns that aging facilities are eroding the military’s technical advantages. Published by the Department of Defense in late

June, the report finds that money intended to support those facilities is routinely diverted to other DOD priorities.

To solve the problem, Congress should create a protected fund of nearly \$4 billion over five years for research infrastructure, the report authors say. They also recommend raising the threshold for minor construction projects from \$9 million to \$20 million to reduce administrative burden and to allow labs to complete projects more quickly. According to the report, the average DOD lab is over 45 years old and has limited funds for modernization and repair work, which leads to technical limitations and potential safety concerns for researchers. **PT**

For more from *FYI*, the science policy news service at AIP, visit <https://aip.org/fyi>.

Correction

June 2026, page 11 — The phase diagram of water inaccurately positioned two features. See the updated graph at <https://doi.org/10.1063/pt.8f1acc4af6>. **PT**

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