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U.S. DEPARTMENT OF ENERGY ANNOUNCES \$18 MILLION TO ADVANCE PARTICLE ACCELERATOR TECHNOLOGIES AND WORKFORCE TRAINING

Accelerators Are Key to Groundbreaking Solutions for Medical, Clean Energy, and National Security Challenges

The U.S. Department of Energy (DOE) today announced \$18 million in new funding to advance particle accelerator technology, a critical tool for discovery sciences and optimizing the way we treat medical patients, manufacture electronics and clean energy technologies, and defend the nation against security threats. The new funding also includes \$5 million for university-based traineeships that will build a diverse, skilled pipeline of American accelerator scientists and engineers.

“Accelerator-based technologies are all around us, from new medical therapies to ways to make solar panels—and we’ve only scratched the surface of their potential to tackle a host of 21st-century challenges,” said **Secretary of Energy Jennifer M. Granholm**. “This new funding will help us discover even more opportunities to advance the health and prosperity of our nation and planet with the best technology available, while investing in the next generation of American problem-solvers.”

Particle accelerators produce beams of charged particles that can be used for a variety of research purposes. Accelerator technology has been used in medical imaging and cancer therapy, the manufacturing of semiconductors—which power most electronic devices, including clean energy technologies like solar panels—and non-chemical methods of destroying national security threats like pathogens and toxic chemicals.

DOE's National Laboratories played a crucial role in the early development of particle accelerator technologies. In 1930, Ernest Lawrence, founder of Lawrence Berkeley National Lab, developed the first circular particle accelerator. The Lab has since pioneered the use of protons, alpha particles (helium nuclei), and other light ions for therapy and radiobiology. Other DOE accelerator facilities have helped develop critical accelerator technology, including the technology behind external-beam cancer therapy and isotopes for diagnosis and therapy.

Under this announcement, up to \$6 million in funding will be awarded as part of DOE's

Accelerator Stewardship program in the Office of Accelerator R&D and Production. This funding will focus on advancing these technologies for medical, energy, industrial, and security applications that can benefit American society.

Up to \$7 million will be awarded as part of DOE's "Data Analytics for Autonomous Optimization and Control of Accelerators and Detectors" funding opportunity from the Office of Nuclear Physics (NP). This funding will focus on tackling technical challenges, optimizing the operations of complex accelerators, and advancing experimental discovery at labs and facilities across the nation.

Up to \$5 million will be awarded as part of DOE's "Traineeship in Accelerator Science & Engineering" funding opportunity from the Office of High Energy Physics (HEP). This funding will go towards traineeships at universities with accelerator programs, including minority-serving institutions.

For more information on the "Research Opportunities in Accelerator Stewardship" and the "Traineeship in Accelerator Science & Engineering" funding opportunities, visit the HEP [funding opportunity page](#).

For more information on the "Data Analytics for Autonomous Optimization and Control of Accelerators and Detectors" funding opportunity, visit the NP [funding opportunity page](#).

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