



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairman Jamaal Bowman (D-NY)
of the Subcommittee on Energy

Subcommittee on Energy Hearing:
Investigating the Nature of Matter, Energy, Space, and Time
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Good morning, and thank you to our panel of esteemed witnesses for joining us today to discuss the research and infrastructure needs of the Department of Energy in the exciting fields of high energy physics and nuclear science. As part of the discussion today we will examine the critical research and facilities supported by DOE's Office of Science High Energy Physics and Nuclear Physics programs, as well as related work in its Accelerator and Isotope programs. I especially want to welcome the newly Senate-confirmed Director of the Office of Science, Dr. Berhe, to her first appearance before Congress since being confirmed. I look forward to working with you.

As Chairman of the Subcommittee on Energy, I often reflect on how the work we do here will prepare us for a better and brighter future for everyone. Experts such as yourselves help us to understand and fight for better policies here in Congress that will enable a healthier and safer world through innovations in science and technology. We need to keep these big picture goals top of mind with everything we do. We need to continue to take urgent action to make these goals a reality.

This starts with supporting robust funding across our scientific enterprise. In April, I chaired a hearing in which DOE's Under Secretary for Science and Innovation Dr. Geraldine Richmond testified on the importance of strong federal science programs to maintain our scientific leadership and tackle the problems of the 21st century, including the climate crisis. We discussed the lackluster FY 2023 budget request from the administration for DOE's Office of Science at length, and the impact that will have on our goals by insufficiently supporting large-scale scientific experiments, research, and associated facilities. We need to do better.

But the budget request is not the sole focus of today's hearing, though I'm certain it will be part of the discussion. We are here to discuss the fields of high energy physics and nuclear physics, which probe some of the biggest unanswered questions on the most basic nature of our world. What is the universe made of? Why is the universe made of *something* rather than *nothing*? And how do the materials that make up the universe stay together? We are able to push the frontiers of human knowledge on these topics through cutting-edge research and large experiments that attract international participation, including by supporting the diverse scientific workforce that is necessary to the success of these programs.

A related area of nuclear science that we'll be discussing today is on nuclear isotope research, development, and production. Isotopes are materials that we use every day to enhance our lives. Dozens of isotopes are produced worldwide for unique applications, ranging from cancer treatment, to powering batteries in space exploration, to making the food we consume safer. And the list goes on. Unfortunately, many isotopes have a single source in the entire world, and many of those rely on Russia in some part of the supply chain. Like many commodities, the nation's isotope supply is at risk due to the Ukraine-Russia conflict. Even without policy action banning the isotope trade between the U.S. and Russia specifically, our supply is threatened by the impacts we are already seeing in the banking and shipping industries. We need to have these conversations to better enable a secure and resilient U.S. isotope supply.

Before I close, I want to acknowledge the important role that these fundamental scientific fields play in enhancing our well-being. Humanity has always been driven to understand the nature of the universe and our place within it. Thanks to federal support for this kind of research, unprecedented discoveries are within our grasp. Another huge benefit of fundamental research is the applications it can have on the nation's health, prosperity, and security. For example, the research supported by the Office of Science in these high energy and nuclear science fields contribute to advanced technology development, such as artificial intelligence and quantum information science. The materials properties and interactions we discover in these programs are directly applicable to the development of microelectronics, which in turn are used to strengthen the experiments these programs steward. These are crosscutting areas of scientific importance to our country's future. I just want to emphasize this point to my colleagues here in Congress as we work to support robust and historic authorizations for these federal science programs in bipartisan, bicameral conference negotiations on national competitiveness policies.

With that said, thank you all again for being here today, and I look forward to this discussion.