



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

Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Subcommittee on Energy Hearing:

Investigating the Nature of Matter, Energy, Space, and Time

June 22, 2022

Chairman Bowman, thank you for holding this important hearing today, and thank you to our esteemed panel of witnesses for being here.

We are here to examine the Department of Energy's role in advancing our understanding of the foundational underpinnings of matter, energy, space, and time. DOE supports research in these areas through the Office of Science's High Energy and Nuclear Physics programs. We will also use this occasion to highlight how progress in these fields can be translated into technologies, such as particle accelerators and isotope production systems, that improve the health and welfare of American citizens across the nation. The latter has become a particularly salient issue due to Russia's war on Ukraine and its impact on the supply chains for several important isotopes.

The High Energy Physics program studies fundamental particles and their interactions with each other to gain insight into the very nature of our universe. This program pursues this mission through research at universities and national labs, and through its stewardship of unique scientific facilities and large-scale experiments.

Many other scientific disciplines and economic sectors have benefited from the advanced technologies, research tools, and analysis techniques pioneered by this program. For example, the superconducting magnet technology first developed for this research now comprises the core of MRI machines, which as we all know have significantly enhanced our medical diagnostic capabilities.

Of equal importance is the Department's Nuclear Physics program. This program aims to discover, explore, and understand all forms of nuclear matter observed in nature, and translate that knowledge into technologies that can benefit society in the areas of commerce, medicine, and national security.

This program has led to practical outcomes that benefit Americans every day, including advances in nuclear power, medicine, and environmental and geological sciences.

Also of note, until recently, DOE's Isotope R&D and Production program was a part of its Nuclear Physics program, and it still benefits immensely from that research. The Isotope program develops production methods and supplies critical radioactive and stable isotopes for a

variety of uses. These isotopes are high-priority commodities of strategic importance because of the essential role they play in medical diagnosis and treatment, discovery science, national security, and a host of other areas. As we will hear today, this program is a vital source of isotopes that are in short supply or that we are not yet capable of producing domestically.

As illustrated by a slate of recent hearings, other oversight activities, and current legislation including the America COMPETES Act, a top priority of this Committee is the overall health of the DOE Office of Science, especially in light of its lackluster budget requests over multiple Administrations. This is particularly true of its portfolio of construction projects and user facilities, each of which is a unique resource that drives scientific progress and serves as a magnet for international research talent. I look forward to discussing these issues and more with our witnesses here today.

Thank you. I yield back.