



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

Opening Statement

Chairwoman Lizzie Fletcher (D-TX)
of the Subcommittee on Energy

Energy Subcommittee Hearing:
*Biological Research at the Department of Energy: Leveraging DOE's Unique
Capabilities to Respond to the COVID-19 Pandemic*

Friday, September 11, 2020

Good afternoon and welcome to today's hearing on biological research at the Department of Energy, where we will hear about how these capabilities are being leveraged to respond to the COVID-19 pandemic. I want to thank Ranking Member Lucas, Members of the Energy Subcommittee, and our witnesses for joining us today.

Members of this Subcommittee are enthusiastic about the energy innovations that are coming out of DOE's national laboratories. And rightfully so, given that the labs have provided our country with breakthroughs like supercomputing, inventing new materials, pioneering efficient power lines, improving automotive steel, and discovering 22 elements. Yes, the periodic table would be much smaller without the National Labs.

As the COVID-19 pandemic began to unfold in the US, it became apparent that DOE's laboratories and programs were also well positioned to help us respond to the virus. It is perhaps not well known, but this territory of research is not new to the labs. In fact, as an example, National Lab scientists developed a non-toxic foam that neutralizes chemical and biological agents. It was this foam used to clean up congressional office buildings and mail rooms exposed to anthrax in 2001.

Lab scientist are also credited for developing the field of nuclear medicine, producing radioisotopes to diagnose and treat disease, designing imaging technology to detect cancer, and developing software to target tumors while sparing healthy tissue.

DOE Labs house and operate national user facilities like the Joint Genome Institute, established by the department in 1997 as part of the Human Genome Project. Today, Institute researchers survey the biosphere to characterize organisms relevant to the DOE science missions of bioenergy, global carbon cycling, and biogeochemistry. They also provide advanced sequencing

and computational analysis of genes related to clean energy generation and environmental characterization and cleanup.

Leveraging these capabilities has enabled researchers to develop countermeasures against the novel coronavirus like diagnostic tests and allowed them to assess transmission and evolution dynamics as the virus spreads globally.

This hearing will examine the historic reasons for why the department possesses advanced bioscience capabilities to address the nation's grand challenges and to stimulate innovation; how this expertise and DOE's biological research tools are being leveraged to respond to the COVID-19 pandemic; and what future directions for the Department's biological system research can provide solutions for our nation's most pressing issues.

I look forward to hearing from our witnesses sharing their expertise on these topics as well as hearing how the Science Committee can best support DOE's biological research activities to unleash the next generation of innovation.

But, before I recognize Ranking Member Lucas, I would like to take a moment to acknowledge that we are holding this hearing on the 19th anniversary of the September 11 attacks, and to ask for a moment of silence for us to remember and honor those who lost their lives, those whose lives were forever altered, and our first responders, the brave men and women who rushed in to help our fellow Americans.