COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Frank Lucas

Subcommittee on Energy Hearing – *"Biological research at the Department of Energy: Leveraging DOE's unique capabilities to respond to the COVID-19 pandemic"*

September 11th, 2020

Thank you, Chairwoman Fletcher for hosting this hearing, and thank you to all our witnesses for being with us this afternoon.

During all the challenges and uncertainties of this pandemic, one thing has stood out: our scientific community has gone above and beyond in the effort to understand, treat, and prevent COVID-19.

The Department of Energy and its Office of Science and National Labs have been central to this effort. Today we have the chance to narrow our focus to DOE's biological research efforts—in particular, the Biological and Environmental Research program, or B.E.R.

B.E.R. is a high-priority research area within the Office of Science that has consistently received bipartisan support from this Committee. From examining the complex behavior of plants and microbes to developing new approaches to characterizing genomic information - the B.E.R. portfolio helps address today's public health challenges while preparing us for the next generation of bioscience R&D.

Much of this work is carried out through B.E.R.'s user facilities, including the Joint Genome Institute, the preeminent facility for sequencing plants and microbes. Originally created to lead DOE's role in the Human Genome Project, JGI sequences and analyzes more than 200,000 billion bases of DNA each year.

Another key B.E.R. user facility, the Environmental Molecular Sciences Laboratory, or EMSL, offers over 50 premier instruments and modeling resources to assist researchers in understanding complex biological interactions. EMSL also offers access to high

performance computing resources to support advanced experimental research in the biosciences.

Dr. Kelly Wrighton is here with us today and her work makes great use of B.E.R. resources. Dr. Wrighton is an Associate Professor at Colorado State University and a recipient of the Presidential Early Career Award for Scientists and Engineers. I look forward to hearing more from her on the value of user access to B.E.R.'s resources.

B.E.R. user facilities, along with the other 25 user facilities maintained and operated by the Office of Science, are vital tools of scientific discovery and important drivers of national economic competitiveness. No other system in the world grants this kind of cutting-edge technology access to tens of thousands of researchers each year.

But other countries have taken notice. Developing the most advanced scientific facilities has become an intense international competition. The nation with the fastest supercomputer or most complete genomic data set, for example, will hold a distinct advantage in nearly every field from materials science to predictive atmospheric modeling.

Office of Science programs like B.E.R. need robust Federal support for large-scale user facilities, which academia and industry simply cannot afford. This is why a key component of my bill, H.R. 5685, the Securing American Leadership in Science and Technology Act, is a comprehensive authorization of the B.E.R. program, which includes a user facility development program and authorization of important initiatives like the Bioenergy Research Centers. This legislation also doubles funding for the entire Office of Science over ten years.

This significant investment is essential to U.S. leadership in biological and environmental research. Whether it's COVID-19 or the next public health challenge, our understanding of these complex systems is dependent on the basic research conducted by B.E.R. and the Office of Science. I urge my colleagues on both sides of the aisle to join me in focusing our limited legislative days on these bipartisan programs.

I once again want to thank our witnesses for being here today. I look forward to a productive discussion. Thank you Chairwoman Fletcher and I yield back the balance of my time.