



## Opening Statement of Energy Subcommittee Chairman Randy Weber

Joint Research & Technology and Energy Subcommittee Hearing  
*Pursuing the Golden Age of Innovation: Strategic Priorities in Biotechnology*  
June 5, 2025

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Good morning. Today, the SST Committee is gathered to discuss the current landscape of biotechnology, including recent advancements, challenges, and future prospects in this dynamic field. Biotechnology has the potential to revolutionize a wide range of sectors, but it also poses significant risks if exploited by malicious actors. That is why the 2022 National Defense Authorization Act established the National Security Commission on Emerging Biotechnology to provide a clearer picture of biotech's current and potential capabilities.

The Department of Energy (DOE) has unique computing, biology, and data science capabilities that enable it to excel in transforming biotechnology. The agency has some of the world's leading X-ray and neutron sources, allowing researchers to study molecular structures, essential for pharmaceutical development. Additionally, DOE is home to some of the fastest supercomputers on the planet, which facilitate the accurate modeling of complex biological systems. The Department is dedicated to ongoing research and is skilled in maintaining well-curated, high-quality data to help the scientific community advance. This expertise, alongside DOE's network of user facilities, positions it to play a vital role in driving progress in biotechnology.

Thanks to investments made over the past few decades, including efforts like the Human Genome Project, which was supported by the Department of Energy and the National Institutes of Health, biotechnology has gradually shifted from purely basic research to more applied applications. This nexus between basic research and potential commercial technology is evident in the Department of Energy's Bioenergy Research Centers (BRCs). Researchers at the BRCs provide foundational science to industry partners, who can develop new bioproducts and biofuels based on their discoveries. These centers, funded through the DOE Office of Science, conduct basic research in genomic sciences and microbial systems biology to advance energy-relevant systems biology.

As this technology progresses into more applied applications, we must be increasingly mindful of the potential negative consequences it could have if it were in the wrong hands. The Chinese Communist Party is investing significant sums of money into the biotech field for traditional commercial uses, as well as military purposes. In various technology sectors, we have observed that the CCP will not hesitate to exploit, manipulate, or steal research that they believe could provide them with an advantage, whether militarily or otherwise. I look forward to discussing how the United States balances the importance of open, transparent science with the need to restrict access to certain types of research.

I am also eager to discuss the recommendations developed by the National Security Commission on Emerging Biotechnology, based on its broad assessment of the current U.S.

biotechnology research and development ecosystem. It's essential we explore the innovative possibilities for the future of biotechnology to address key challenges and enhance national security. With that, I yield back.