

Overall goals for workshop –

The Interagency Synthetic Biology Working Group, charged under the Biological Sciences Subcommittee of NSTC, is holding a workshop on October 16-17 in the Washington, DC area, to examine a roadmap for science and technology development in the field of synthetic biology. The workshop is structured as a series of visionary talks from experts in the community followed by examination of forward looking case studies in smaller breakout groups designed to 1) highlight gaps in science and technology; and 2) identify opportunities for collaboration across agencies in the field of synthetic biology. By the end of the workshop, we hope to have validated a roadmap for science and technology in the field of synthetic biology that addresses basic science and mission specific technology priorities across USG. We believe the roadmap and workshop together will benefit the research agendas in individual agencies as well as advance science and technology collaboration across agencies; all to leverage advances in synthetic biology to serve the nation.

Themes for use cases:

Bioenergy/Agriculture

Cells as Factories

Cells as Medicine

Biomanufacturing

Questions associated with Use Cases

1. What are the current barriers to achieving the use case?
 - a. Technology barriers
 - b. Access / cost barriers
 - c. Personnel / expertise
 - d. Manufacturing, including faculty and supply chain barrier
 - e. Regulatory barriers / public acceptance / policy and economic driver
2. What new technology, infrastructure, training or other solutions would be needed to realize the use case?
3. Does the EBRC roadmap address technologies needed to realize this use case?
4. What enabling / platform technologies would support this and other use cases?
5. What is the timeline for feasibility with appropriate resources/ investment?
6. In what ways would coordination of investments de-risk, facilitate the realization of this use case, and/or accelerate research to translation in this area?
7. How does investment in technologies associated with this use case enable US competitiveness (or lack of investment hurt US global competitiveness).

1. Barriers and Solutions

	Current barriers to achieving the use case	Potential solutions to realize the use case
Technology		
Access / cost		
Personnel / expertise		
Manufacturing, including faculty and supply chain		
Regulatory		
Public acceptance		
Policy and economic driver		

2. Does the EBRC roadmap address technologies needed to realize this use case?

--

3. What enabling / platform technologies would support this and other use cases?

--	--

4. What is the timeline for feasibility with appropriate resources/ investment?

--	--

5. In what ways would coordination of investments de-risk, facilitate the realization of this use case, and/or accelerate research to translation in this area?

--	--

6. How does investment in technologies associated with this use case enable US competitiveness (or lack of investment hurt US global competitiveness).

--	--