

Interagency Workshop on Synthetic Biology

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
- Cellular Factories
- Medicine
- Biomanufacturing

Questions associated with Use Cases:

1. What is the timeline for feasibility? 5 years, 10 years, 20 years
2. Is it technically feasible? If not, what are the major technical hurdles to be overcome?
3. Are there additional basic science, enabling technologies, and/or infrastructure needs?
4. What are the key opportunities for collaboration that could jump start/ accelerate this use case?
5. What are the barriers to public acceptance and commercialization?
6. How does investment in technologies associated with this use case enable US competitiveness (or lack of investment hurt US global competitiveness)?
7. What is needed in terms of training and workforce development?

Sector: _____ Case Study Title: _____

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| 1. What is the timeline for feasibility? Outline milestones at 5, 10, 20 years as appropriate. | |
| <i>5 years</i> | |
| <i>10 years</i> | |
| <i>20 years</i> | |
| 2. Is it technically feasible? If not, what are the major technical hurdles to be overcome? | |
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| 3. Are there additional basic science, enabling technologies, and/or infrastructure needs? Address each area. | |
| <i>Basic science</i> | |
| <i>Enabling technologies</i> | |
| <i>Infrastructure needs</i> | |
| 4. What are the key opportunities for collaboration that could jump start/accelerate this use case? | |
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| 5. What are the barriers to public acceptance and commercialization? | |
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| 6. How does investment in technologies associated with this use case enable US competitiveness (or lack of investment hurt US global competitiveness)? | |
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| 7. What is needed in terms of training and workforce development? | |
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