# Biosafety Modernization Initiative Listening Session

# BLUF: Science and technology has evolved; Biosafety policy and oversight need to keep pace

- NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules have served as the foundation for USG wide practices for 40+ years
- Emerging biosafety risks are increasingly technology agnostic
- USG needs a risk-based, coordinated policy and oversight system

### NIH is poised to usher in the next 40+ years of safe research!

### **TODAY'S GOAL: WE NEED YOUR FEEDBACK!**

- To achieve the goal of <u>calibrating oversight to risk</u>:
- SCOPE of policy must <u>address potential risks beyond recombinant or</u> <u>synthetic nucleic acid technologies</u>
- **RED TAPE** can be reduced for certain <u>low-risk recombinant technologies</u> that may no longer warrant the oversight once deemed necessary
- NOTE: All draft options presented are a starting point; we welcome input on additional options that you think should be considered

### NIH Guidelines for 21st Century Biosafety

# CURRENT SCOPE



- Technique-based, focus on recombinant and synthetic nucleic acid molecules
- Includes plants, microbes for environmental remediation, vaccine/gene therapy
- Some covered research under purview of other agency authorities (e.g., USDA, FDA)

# POTENTIAL FUTURE SCOPE



- Risk-based, expand to include wild type agents and other possible biohazards
- Focus on NIH-relevant contained biomedical laboratory research
- Resources allocated for oversight are titrated to risk posed

### **FOR INPUT: Scope Options**

The option, or other option not considered here, that best achieves the goal of modernizing and strengthening biosafety policy to appropriately calibrate oversight to risk.



### **NIH Guidelines Plus**

Current NIH biosafety policy scope of recombinant or synthetic nucleic acids PLUS research with other biohazards to possibly include wild-type agents, proteins (e.g., toxins, prions), others.



### Harmonized with BMBL

Research involving infectious microorganisms (based on risk groups) and hazardous biological materials.



### Life Sciences Research

Broad category accompanied by criteria, and additional guidance about what requires institutional or NIH oversight.



## FOR INPUT: Research requiring less oversight

Types of research that may require less local or NIH oversight based on accrued safety data or oversight by other federal authorities. Examples COULD include:

- Non-biomedical research with plants, agricultural animals, or certain microbes under the purview of other federal agencies such as USDA or EPA
- Clinical research under the purview of the FDA
- Low risk research (e.g., RG1 agents, some transgenic organisms, some expression plasmids)

### Thoughts on proposed options?



Individual opinions welcome on any aspect of this proposal. It would be most helpful in informing the policy to hear individuals' thoughts about:

- The appropriate scope for NIH's new biosafety policy;
- The types of research that should require less local or NIH oversight based on accrued safety data or oversight by other federal authorities;
- The options, or other options not considered here, that best achieve the goal of modernizing and strengthening biosafety policy to appropriately calibrate oversight to

risk.