Charge to the NExTRAC Francis S. Collins, M.D., Ph.D. Director, National Institutes of Health NExTRAC Meeing December 6, 2019





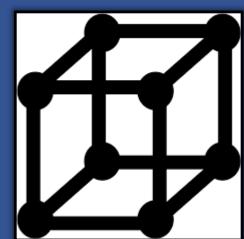
NExTRAC – Moving Forward

- NIH will convene two Working Groups of the NExTRAC to:
 - Establish a framework for a thoughtful approach to assess the potential issues associated with new biotechnologies and their applications
 - Assist in the development of a path forward for biomedical research involving gene drive-modified organisms

Working Group to Establish a NExTRAC Framework

Charge

- Describe effective approaches for prospectively identifying emerging biotechnologies or specific applications with reasonable potential to have important scientific, safety, or ethical considerations
- Conceptualize a framework for NExTRAC deliberation of issues surrounding emerging biotechnologies and applications, including:
 - Guiding principles for when an emerging biotechnology or its applications would significantly benefit from further public deliberation
 - A potential process by which the NExTRAC will consider or evaluate any given emerging biotechnology or its applications



Working Group to Establish a NExTRAC Framework

- Consider:
 - Applications of emerging biotechnologies, given that the way the biotechnology is used often generates the safety, social, or ethical issues
 - Effective horizon scanning approaches; focusing on biotechnologies and applications that are reasonably anticipated vs. hypothetical





Working Group to Establish a NExTRAC Framework

- Consider:
 - Cross-cutting issues that may be relevant for a variety of emerging biotechnologies and applications
 - Strategies for committee engagement and soliciting feedback



The Gene Drives in Biomedical Research Working Group

- Charge:
 - Consider whether existing biosafety guidance is adequate for contained laboratory research utilizing gene drive technology
 - Outline conditions (if any) under which NIH could consider supporting field release of gene drivemodified organisms





The Gene Drives in Biomedical Research Working Group

- Provide advice on the following issues:
 - Given the diverse applications and species that may be used in gene drive research with different risks, is the current landscape of biosafety guidance adequate for contained research?
 - What knowledge and conditions should be in place to help ensure that field release research of gene drive-modified organisms could be conducted safely and ethically?





Anticipated Next Steps

- January 2020: Two Working Groups Established
- Summer/Fall 2020
 - Working Group to establish NExTRAC Framework presents draft report to NExTRAC
 - Gene Drives Workshop
- Fall/Winter 2020/21
 - Working Group on Gene Drives in Biomedical Research presents draft report to NExTRAC

