BSC’s Perspective for NTP Strategic Realignment

- The Why
- The What
- The How
- Rapid Response Questions
The Why

• NTP should be distinct from a traditional academic research effort or even an industrial safety/hazard assessment function. Consider what makes NTP unique in the community of toxicology and hazard/safety assessors. Is it NTP’s:
  ▪ Relative “freedom to operate”?
  ▪ Experience set?
  ▪ Tools?
  ▪ Ability to maintain focus on a challenge for prolonged periods of time?
  ▪ Something else?

• **Polling Question:** What unique value could/should NTP bring to this field of science (or science in general)? What do you think?
The Why: Vision and Mission

- **Vision**
  
  To advance public health and the discipline of toxicology through the use of innovative tools and strategies that are translatable, predictive, and timely.

- **Mission**
  
  Solve contemporary public health problems by characterizing contemporary environmental hazards in human-relevant systems. Inform a future state that meets rapidly changing public health needs by bridging mechanistic insights to phenotypic outcomes.

DRAFT- In revision with staff engagement
We shared with you our concept of a *Translational Toxicology Pipeline* with an intent to benefit public health. In that context, *translation* refers to deriving insights into potential human hazards from non-animal test systems. Inherent in that aim is a need for NTP to be “human relevant”.

- What does it mean for NTP’s work to be “human relevant” and how would we incorporate this objective into the assessments that NTP carries out?
The How

- We shared with you an intent to build greater confidence in regulatory and policy decision-making from in silico, in vitro, and literature-based evidence.
  
  What challenges will NTP face attempting to do this? What approaches might we use to build confidence in decision-making from non-traditional endpoints or evidence?

Whiteboard Question: Are there partnerships that we should be leveraging?
Rapid Response Questions

• Complex 3D in vitro systems are rapidly evolving. What is the opportunity for those systems to enhance our efforts? What are the challenges?
Rapid Response Questions

• Computational approaches are also rapidly evolving. How should NTP be engaging and capitalizing on machine learning capabilities? Where are those capabilities best applied? What are the challenges?
Rapid Response Questions

• There is a growing interest in revising our current approaches to carcinogenicity hazard assessments for a variety of reasons. What do you think about current approaches to carcinogenicity testing? What are the best opportunities to refine or revolutionize that approach?